ORDER NO. VRD8904M612

Service Manual

Operating Instructions
Electrical Adjustment Procedures
Mechanical Adjustment Procedures
Block Diagrams
Schematic Diagrams
Circuit Board Diagrams
Exploded Views
Replacement Parts List

Panasonic S-VHS VHS PAL 625 Hi-Fi

Video Cassette Recorder

AG-7330 -A -B -E -EP -EG

Remote Controller

AG-A730-E

RS232C Interface Adaptor

AG-IA232-E

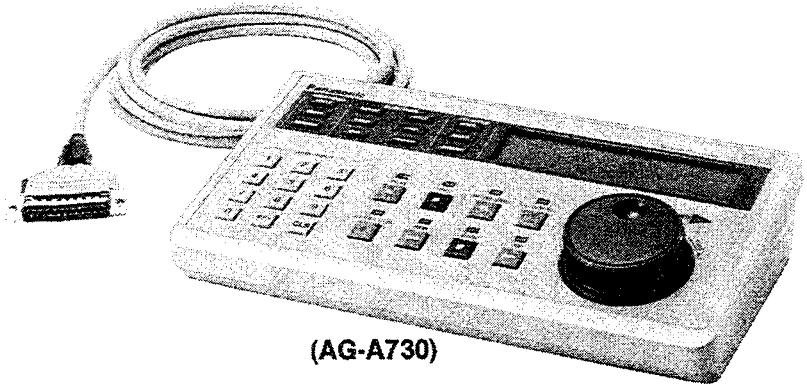
34P Interface Adaptor

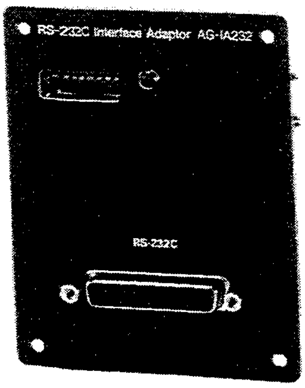
AG-IA34-E

Rack Mount Adaptor

AG-M730-E

(AG-7330)


(AG-A730)



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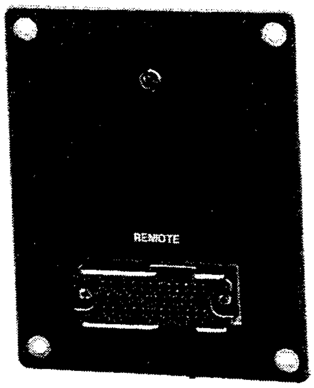

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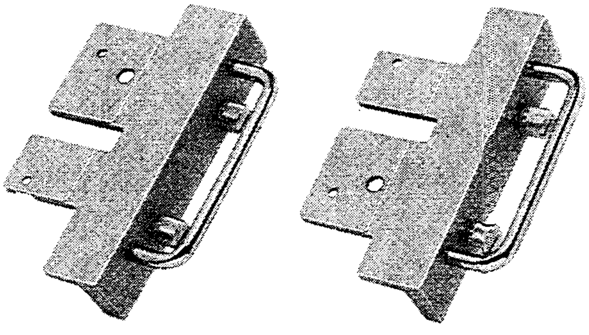
(AG-M730)

Panasonic

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INTRODUCTION

This Service Manual contains all the technical information which will allow service personnel to understand and service this Panasonic SVHS 625 VHS PAL multi purpose video cassette recorder model AG-7330/Remote Controller AG-A730/Interface Adaptor AG-IA232 and AG-IA34.
By the use of the S-VHS system, a sharp picture quality with high resolution is obtained, and advanced editing by easy operation is realized by the introduction of high reliability mechanisms.
In Addition to recording and playing back PAL (S-VHS/VHS) signals, the AG-7330 both records and plays back in the CCIR system (VHS only) and lays back M-NTSC VHS tape. This enables viewing of most of the world's pre-recorded videotapes, and offers versatile convenience for educational and business uses.

CONTENTS

1. AG-7330-A/-B/-E/-EP/-EG 1
2. AG-A730-E 6-1
3. AG-IA232-E 7-1
4. AG-IA34-E 8-1
5. AG-M730-E 9-1

Video Cassette Recorder

AG-7330

-A
-B
-E
-EP
-EG

SPECIFICATIONS

ITEM	SPECIFICATION
Power	Source: AC 220/240V 50-60Hz
	Consumption: Approx. 55W
Video	Head: 2 rotary heads, helical scanning system 49μm (NOR) × 2, 35μm (SS) × 2 1 flying (rotary) erase heads 97μm (FE)
	Luminance: FM azimuth recording
	Colour signal: Converted subcarrier phase shift recording
	Input Level: VIDEO IN (BNC): 1.0Vp-p, 75Ω unbalanced S-VIDEO IN (4P DIN): Y; 1.0Vp-p, 75Ω unbalanced C; 0.3Vp-p (burst level), 75Ω unbalanced Composite sync (BNC): 4.0Vp-p (negative pulse), 75Ω unbalanced
	Output Level: VIDEO OUT (BNC): 1.0Vp-p, 75Ω unbalanced × 2 S-VIDEO OUT (4P): Y; 1.0Vp-p, 75Ω unbalanced C; 0.3Vp-p (burst level), 75Ω unbalanced
	Signal-to-Noise Ratio (VHS): B/W; 45dB Colour; 45dB
	Horizontal Resolution: B/W; more than 400 lines (S-VHS) 300 lines (VHS) Colour; more the 400 lines (S-VHS) 240 lines (VHS)

ITEM	SPECIFICATION
Audio	Head: Normal Audio/Control: 1 stationary head Hi-Fi Audio: 2 rotary heads (36μm) Erase: 1 full track erase 2 selectable audio erase
	Track: 2 tracks (Normal-stereo), 2 channels (Hi-Fi sound-stereo)
	Input Level: LINE IN (PHONO): −8dBv, 47Ω unbalanced × 2 MIC IN (1/4″ phone): −60dBV, 4.7kΩ unbalanced × 2
	Output Level: LINE OUT (PHONO): −8dBv, 600Ω unbalanced × 2 AUDIO MONITOR (PHONO): 0dBV, 600Ω unbalanced HEADPHONES: −60dBV∼−20dBV, 8Ω unbalanced
	Frequency Response: Normal: 50Hz∼12kHz Hi-Fi Sound: 20Hz∼20kHz
	Dynamic Range: Hi-Fi Sound: 90dB
	Signal-to-Noise Ratio: 50dB (Normal Audio NR ON)
Time Code	Input Level (phono): 1.0Vp-p, 10kΩ unbalanced
	Output Level (phono): 2.4Vp-p, low impedance unbalanced
Television System	CCIR Standard (625 lines, 50 fields) PAL Colour Signal EIA (525 Lines, 60 fields) 4.43MHz modified NTSC colour signal
Tape Speed	23.39mm/s (PAL) 33.35mm/s (modified NTSC)
Tape Format	S-VHS tape, VHS tape (Tape width 1/2″ (12.7mm))

(Please see reverse side)

Specifications are subject to change without notice.
Weight and dimensions shown are approximate.

(Continued from cover page)

ITEM	SPECIFICATION	ITEM	SPECIFICATION
Record/ Playback Time	180 min. with NV-SE180E 120 min. with NV-T120 (modified NTSC Playback)	Optional Accessories	• Remote Search Controller (NV-A505) • Editing Controller (AG-A750/AG-A650/NV-A500/NV-A960) • Remote Controller (AG-A600/AG-A730) • S-VIDEO Cable (4 P) (AG-C71A...5 m) (AG-C70A...3 m) • RS-232C Interface Adaptor (AG-IA232) • 34 Pin Interface Adaptor (AG-IA34) • Rack Mount Adaptor (AG-M730) • RF Converter (-A .....ENC47902) (-B .....ENC47957) (-E .....ENC47956) (-EN...ENC47901)
FF/REW Time	About 3 min. with NV-SE180E		
Operating Condition	Temperature: 5°C~40°C Humidity: 35%~80%		
Dimension	424(W)×132(H)×423(D) mm		
Weight	Approx. 11.2 kg		
Standard Accessories	S-VIDEO Cable (4 P) (VJA0510) RF Converter Adaptor		

Specifications are subject to change without notice.
Weight and dimensions shown are approximate.

CONTENTS

OPERATING INSTRUCTIONS 3
DIMENSIONS 9

REGULAR MAINTENANCE 2-1
DISASSEMBLY PROCEDURES 2-3
1. DISASSEMBLY FLOWCHART 2-3
2. DETAILED DISASSEMBLY METHOD 2-3
MECHANICAL ADJUSTMENT PROCEDURES 2-8
1. SERVICING FIXTURES & TOOLS 2-8
2. CYLINDER MAINTENANCE PROCEDURES 2-9
3. SERVICE INFORMATION 2-9
4. TAPE INTERCHANGEABILITY ADJUSTMENT PROCEDURES 2-9
5. OTHER ADJUSTMENT PROCEDURES 2-15
6. ASSEMBLY AND ADJUSTMENT PROCEDURES OF MECHANISM 2-19

ELECTRICAL ADJUSTMENT PROCEDURES 2-26
1. TEST & SERVICE EQUIPMENT 2-26
2. ADJUSTMENT PROCEDURES 2-26
CIRCUIT BOARD LAYOUT 2-38

BLOCK DIAGRAMS 3-1

SCHEMATIC DIAGRAMS & CIRCUIT BOARDS ... 4-1

EXPLODED VIEWS 5-1
REPLACEMENT PARTS LIST 5-8
1. SERVICING FIXTURES & TOOLS LIST 5-8
2. MECHANICAL REPLACEMENT PARTS LIST 5-8
3. ELECTRICAL REPLACEMENT PARTS LIST 5-10

FEATURES

1. Amorphous heads and high quality picture

Picture quality has been improved by the use of the S-VHS system and the amorphous heads. Resolution of over 400 lines and less noise are realized in the following conditions.

- FM carrier frequency: White peak; 7 MHz
  Sync tip; 5.4 MHz
- Installation of sub-emphasis circuit
- White clip level: 210%
- Use of S-VHS tape

2. High Speed VISS and VASS Automatic Search

By recording a VISS or VASS signal at the beginning of an event on a cassette tape, the event can be searched and then played back automatically. These signals can be recorded and erased easily during playback or recording.

- **High Speed VISS (VHS Index Search System) Automatic Search**
  During the playback of a tape, if a VISS signal has been recorded at the beginning of an event, the scene or song can be searched (within 99 scenes) and then played back automatically. It is recommended to search for the fourth scene or the scene recorded after the scene currently being played back.
- **High Speed VASS (VHS Address Search System) Automatic Search**
  It is possible to search for a specific event and play it back automatically by selecting the number of its corresponding VASS signal.

3. ON-SCREEN mode setting

You can visually confirm each mode on the screen of the TV Monitor.

4. System editing

An editing system can be configured by connecting the AG-7330 with the optional 34Pin Interface Adaptor (AG-IA34) to an Editing Controller.

- Up to three source (playback) units can be connected simultaneously by using a Remote Search Controller (NV-A505, option).
- It is possible to configure a system by connecting the unit to the AG-A750, AG-A650, NV-A500 or NV-A960 Editing Controller (options).

5. RS-232C Interface

The optional AG-IA232 Interface Adaptor allows control capability by remote controller AG-A730.

6. Multi-TV Standard-PAL/CCIR/ NTSC 4.43

In addition to recording and playing back PAL (S-VHS/VHS) signals, the AG-7330 both records and plays back in the CCIR system (VHS only) and plays back NTSC 4.43 S-VHS/VHS tapes.

7. Dual audio channel Dolby* NR system

Because there are two normal audio tracks, stereo or bilingual programmes can be recorded and played back. The sound quality is further improved due to the built-in Dolby NR system

*Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
*"DOLBY" and the double-D symbol ᗡD are trademarks of Dolby Laboratories Licensing Corporation.

8. Time code recording and playback

The EBU time code can be recorded and played back on the audio CH2 track.

9. H-aligned framing servo

Sometimes, when editing video signals conforming to the CCIR standard, frame phase misalignment or horizontal distortion occurs between adjacent edited portions. This unit employs a framing servo to align the frames, thus eliminating such errors at the edit start and end points.

10. JOG/SHUTTLE search function using dial

A programme segment on the tape can be rapidly and accurately found by using the SHUTTLE search in which the tape speed is varied between 0 and 9 times the normal speed, or the JOG search in which the tape speed is varied in accordance with the rotational speed of the dial.

11. Recording and playback of Hi-Fi sound and assemble editing

You can record and play back Hi-Fi Sound even without a video input signal. You can also independently record a total of four channels, that is Hi-Fi Sound (CH1/CH2) and Normal Audio CH1/CH2.

12. Rack mounting possible due to front loading

The unit is a cassette tape insertion type employing front loading, hence it can be easily installed in an IEC standard 19-inch rack.

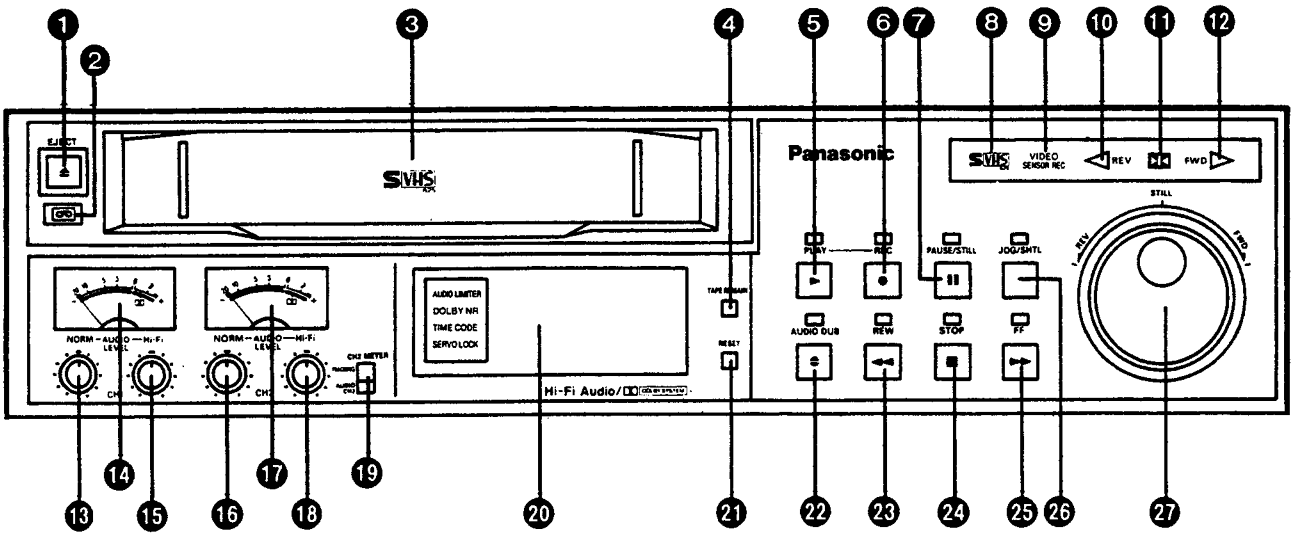
13. Other features

- GT4W Head System enables double fine slow motion.
- Video sensor recording automatically records the input signal from the Video Input Connector.
- Large function display.
- Flying erase-based editing.

CONTROLS AND THEIR FUNCTIONS

Front

Upper Panel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EJECT
SVHS
Panasonic
VIDEO SENSOR REC
REV
FWD
STILL
PLAY
REC
PAUSE/STILL
JOG/SHTL
AUDIO DUB
REW
STOP
FF
TAPE REMAIN
RESET
NORM - AUDIO - Hi-Fi LEVEL
CH1
CH2
CH2 METER
AUDIO LIMITER
DOLBY NR
TIME CODE
SERVO LOCK
Hi-Fi Audio/
⑬
⑭
⑮
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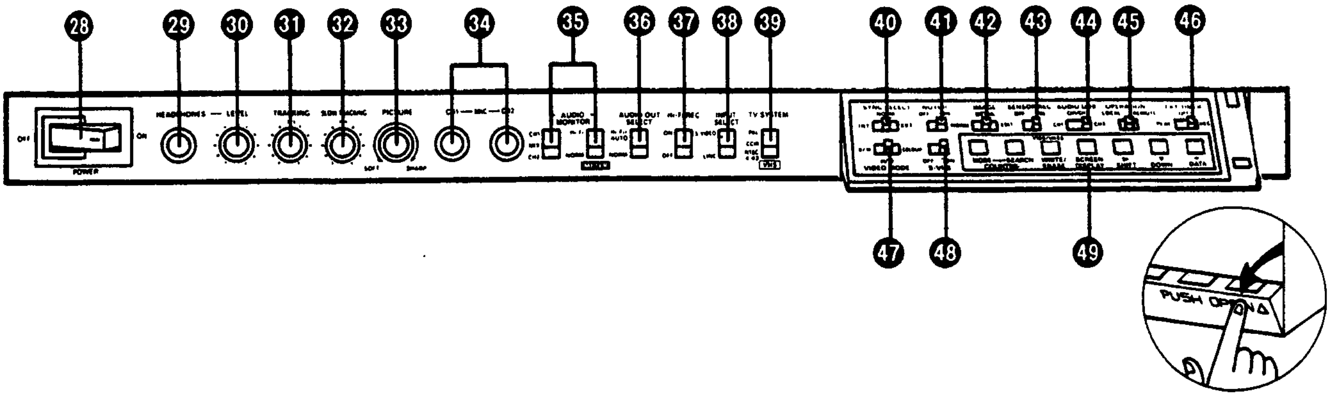
Lower Panel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OFF
ON
POWER
HEADPHONES — LEVEL
TRACKING
SLOW TRACKING
PICTURE
SOFT
SHARP
CH1 — MIC — CH2
AUDIO MONITOR
AUDIO OUT SELECT
Hi-Fi REC
INPUT SELECT
TV SYSTEM
㊼
㊽
㊾
PUSH OPEN

① **Eject Button**

② **Cassette In Lamp**

③ **Cassette Holder**

④ **TAPE REMAIN Button**
Press this button to indicate the length of the segment remaining on the tape.

CAUTION: When the 120 minutes tape is used, the tape remaining time may not be displayed.

⑤ **Play Button/Lamp**

⑥ **Record Button/Lamp**

⑦ **Pause/Still Button/Lamp**

⑧ **S-VHS Lamp**

⑨ **VIDEO SENSOR REC Lamp**
This lamp lights up when the SENSOR REC Switch ㊸ is "ON". This lamp will flash in the following condition:

- The SENSOR REC Switch is set to "ON" when no tape is inserted or tape with broken removable tab is inserted.
- The TV SYSTEM Selector ㊴ is set to "NTSC 4.43".

⑩ **REV (rewind) Search Lamp**

⑪ **Search Still Lamp**

⑫ FWD (fast forward) Search Lamp

⑬ Audio (CH1) Normal Audio Level Control

⑭ Audio (CH1) Level Meter

⑮ Audio (CH1) Hi-Fi Sound Level Control

⑯ Audio (CH2) Normal Audio Level Control

⑰ Audio (CH2) Level Meter

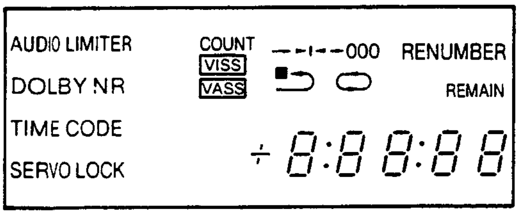
The meter indication can be switched between Normal/Hi-Fi by means of Audio Monitor Selector ㉟. If you set Audio CH2 Selector to "TIME CODE" (setting by ON-SCREEN mode), you cannot use normal audio CH2. In this case, if you set Audio Monitor Selector ㉟ to the "NORM" side, the audio (CH2) level meter will indicate the existence or otherwise of a time code signal. This level meter can be used as a Tracking Meter by setting the CH2 Meter Selector ⑲ to "TRACKING" during playback. Adjust the Tracking Control ㉛ until the meter points its maximum position.

⑱ Audio (CH2) Hi-Fi Sound Level Control

⑲ CH2 Meter Selector

This selector selects between Audio CH2 Level Meter and TRACKING Meter for Audio (CH2) Level Meter ⑰.

⑳ Tape Counter



Audio Limiter Lamp

Dolby NR Lamp

Time Code Lamp

Servo Lock Lamp

–000 :	Indicates the counter (0:00:00) stop mode by pressing the Rewind or Fast Forward Button.
■⊃ :	Indicates the one-time repeated playback mode.
⊂⊃ :	Indicates the continuous repeated playback mode.
REMAIN:	Indicates remaining tape time.
COUNT:	Indicates the linear counter mode. When tape travel starts, the counter will provide an indication of the tape travel in Hours : Minutes : Seconds. When the tape goes past the "0:00:00" point and starts to be rewound, the indication on the tape counter will be prefixed by a minus (–) sign.
VISS:	Indicates the VISS mode and flashes when the VISS signal is recorded or deleted.
VASS:	Indicates the VASS mode and flashes when the VASS signal is recorded or deleted.
–► :	Indicates the search play mode.
–►I◄ :	Indicates the search pause mode.
RENUMBER:	Indicates the VASS renumbering mode.

Note:
Counter function does not work with a tape on which the control (CTL) signal has not been recorded. (CTL is normally laid down while recording video. There is no CTL on a new tape.)

㉑ Reset Button

By pressing the Reset Button, the reading on the tape counter will become "0:00:00". Also, the editing point will be reset.

㉒ Audio Dubbing Button/Lamp

During playback, audio dub may be started by pressing Play ⑤ and Audio Dub Buttons at the same time. Dubbing into CH1, CH2, or both may be done by selecting appropriate channel(s).

- If this button is pressed during stop mode with tape that has removable tabs inserted, the lamp will light up to indicate that audio dub can be made.

㉓ Rewind Button/Lamp

㉔ Stop Button/Lamp

㉕ Fast Forward Button/Lamp

㉖ JOG/SHTL Button/Lamp

㉗ JOG/SHTL Dial

㉘ Power Switch

㉙ Headphone Jack (1/4" Phone)

㉚ Headphone Level Control

㉛ Tracking Control

㉜ Slow Tracking Control

㉝ Picture Quality Adjusting Knob

This knob is used to adjust picture sharpness during playback.

㉞ Microphone CH1/CH2 Jacks (1/4" Phone)

㉟ Audio Monitor Selector

Selects the audio channel which is to be heard on the TV monitor, headphones, through Audio Monitor Output Jack, or VHF Antenna Output Connector.

CH1: To monitor audio CH1 only.
MIX: To monitor mixed CH1 and CH2 audio.
CH2: To monitor audio CH2 only.

Also selects either normal or Hi-Fi for Audio Level Meter ⑭, ⑰, Audio Monitor Connector (⑨ on rear panel) and Headphone Jack ㉙.

㊱ Audio Output Selector

NORM: Normal Audio is output from Audio Output Jacks (⑦ on rear panel).

Hi-Fi/AUTO: If Hi-Fi sound is recorded, Hi-Fi sound will be output. If Hi-Fi Sound is not recorded on the tape. Normal audio will be automatically output from Audio Output Jacks (⑦ on rear panel).

㊲ Hi-Fi REC Switch

ON: Both Hi-Fi and normal audio will be recorded.
OFF: Only normal audio will be recorded.

㊳ Input Signal Selector

㊴ TV SYSTEM Selector

The 3 VHS system, PAL, CCIR and NTSC 4.43, can be selected.
(To select S-VHS PAL, set this selector to the "PAL" position.)

㊵ Sync Mode Selector

The Sync Mode Selector is used to determine the source to which the video recorder will be synchronized during Recording, Playback, and Editing (Dubbing).

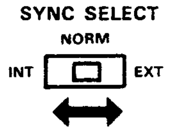
EXT: The tape is synchronized with the external composite sync which is connected to the External Sync Input Connector on the rear panel. For better dubbing stability, synchronize with an external composite sync signal.

NORM: The tape is synchronized to the input video signal. This mode is used for normal recording, playback and dubbing.

Notes:

(1) If during playback, the input signal is noisy or unstable (i.e. not 50 Hz frequency), switch to the "INT" position.
(2) If during playback, there is no input video signal present, synchronization automatically switches to internal reference.

INT: The tape is synchronized to the internal 50 Hz oscillator (derived from internal crystal source). This mode is primarily used for playback. When recording, the setting is set automatically to the NORM mode.
Note: TV system NTSC 4.43 is 60 Hz.



Position of Sync Mode Selector	Playback	Recording
INT	○	×
NORM	○	○
EXT	*1	*1

*1: Be sure to connect the External Sync Signal.
Note: TV system NTSC 4.43 is always set to "INT".

㊶ NOTCH Switch

Normally set this switch to the "OFF" position.

- Set to the "ON" position when playing back tapes with luminance and chrominance signals combined (Y and C signals not separated).

㊷ IMAGE Selector

EDIT: When editing, such as dubbing.
DETAIL: When playing back tapes recorded by a video camera designed for S-VHS or S-VHS tapes. Tapes recorded in the VHS mode cannot be played back.
NORM: Normally place the selector in this position.

㊸ SENSOR REC Switch

OFF: Normally place the selector to this position.
ON: When desired to record the input signal automatically. (The VIDEO SENSOR REC Lamp ⑨ lights up.)

> **CAUTION:**
> When the switch is set to the "ON" position, the unit will automatically turn OFF. If a signal is inputted in the Video Input Connector, the unit will turn ON again and start recording.
> The buttons will not operate.

Notes:

- If this switch is set to "ON" when the tape is running, the unit will malfunction. Therefore, make sure the unit is in stop mode before setting this switch to "ON".
- Be sure that the tape counter is in the linear counter (COUNT) mode.
- The SENSOR REC Lamp will flash if the switch is set to "ON" with no tape inserted, tape with broken removable tabs is inserted or the TV SYSTEM Selector ㊴ is set to "NTSC 4.43".

㊹ Audio Dubbing Selector

Selects the audio channel track on which new audio will be recorded.

CH1: To be dubbed into audio channel 1 only.
CH1/CH2: To be dubbed into both channels.
CH2: To be dubbed into audio channel 2 only.

㊺ OPERATION Selector (Remote/Local)

REMOTE: Set the switch to this position when connecting a controller to the Remote Control Connector (⑮ on rear panel). When the switch is in this position, the operation buttons on the unit will be rendered inoperative, and the unit will be controlled by the remote controller. Also, the counter cannot be reset. (The Eject Button will function, however.)

LOCAL: Set the switch to this position when using the unit independently.

㊻ EXT TIMER Selector

REC: To execute timer recording with an external timer.

OFF: Normally place the selector in this position.

PLAY: To execute timer playback with an external timer.

- When performing timer recording or playback, no button operation is needed.

> **CAUTION:**
> When this selector is set to "REC", the VTR will start recording if the power is "ON".

㊼ Video Mode Selector

Used to avoid mistaken operation with the colour/black & white automatic selector circuit.

AUTO: Distinguishes automatically between Black & White and Colour video input signals or playback video signals.

COLOUR: When the colour signal is weak, S/N ratio is insufficient, etc., and the automatic selector circuit does not operate properly, the unit is placed forcibly on "COLOUR".

B/W: When the S/N ratio of the black & white signal is insufficient, causing mistaken operations of the automatic selector circuit, place on "B/W".

Note:
If colour signals are recorded/played back in the black & white mode, or vice versa, the picture quality will deteriorate.

㊽ S-VHS Selector

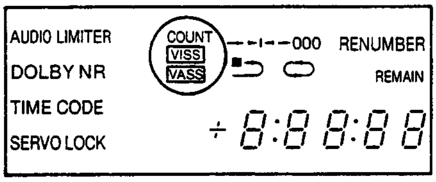
ON: VHS tape and S-VHS tape are automatically distinguished, and recording is done in the corresponding mode.

OFF: Both S-VHS tape and VHS tape are recorded in VHS mode.

㊾ MODE Button

Each time this button is pressed, the mode indicator in the tape counter will change as shown below.

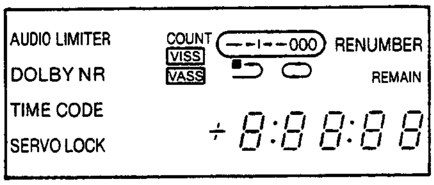
"COUNT"→"VISS"→"VASS"→"COUNT"...



Notes:
- The ON-SCREEN mode will also change at the same time.
- When the mode is changed to another, the repeat function will be set to "OFF.
- During search function, the mode can not be changed.

SEARCH Button

Each time this button is pressed, the following indicator will change as shown below.



- **Counter mode**
  "OFF"→"→000"→"→▶"→"→▶|◀"→"OFF"...
- **VISS/VASS mode**
  "OFF"→"→▶"→"→▶|◀"→"OFF"...
- This button will not function during ON-SCREEN mode.

WRITE/ERASE Button

When VISS/VASS WRITE mode is displayed on the screen, this button will function as WRITE Button. When the mode is search pause, the button will function as ERASE Button.

Note:
This button is inoperative when the cassette tape's tab is broken, the SENSOR REC Selector is "ON" or the VTR is in REMOTE mode.

SCREEN DISPLAY Button

Press this button to display the ON-SCREEN mode (counter, VISS or VASS-depending on the selection of the MODE Button) on the screen.

Note:
This button is inoperative when " →▶ " or " →▶|◀ " indicator is lighted up, the SENSOR REC Selector is "ON", or the VTR is in REMOTE mode. If the SENSOR REC Selector is set to "ON" or the VTR mode is changed to REMOTE during the menu is displayed on the screen, ON-SCREEN mode will forcibly be canceled.

When this button is pressed together with the DOWN Button, Initial Setting will be displayed on the screen.

Note:
These buttons are inoperative when the VTR is in VASS SEARCH REPEAT or REMOTE mode.

- Press this button again. The normal picture will appear.

SHIFT Button

This button is used to change the menu pages of ON-SCREEN mode.
Also used to shift the flashing of the indicator rightward.

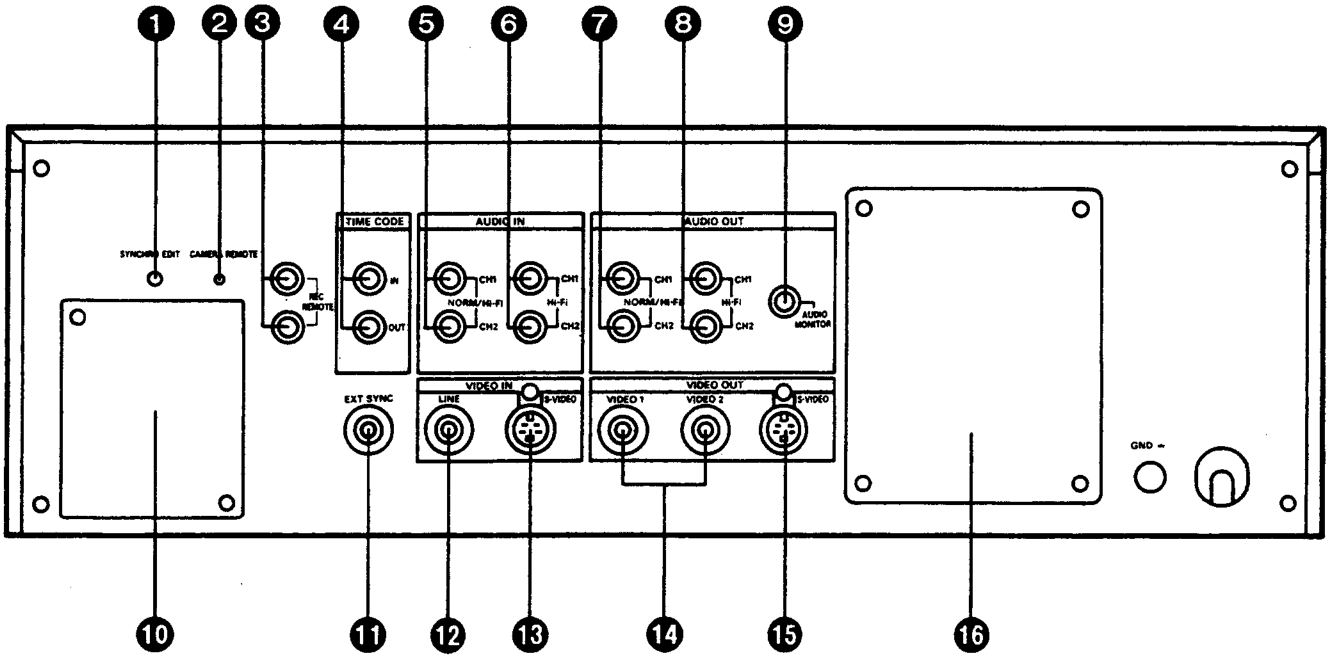
DOWN Button

This button is used to shift the flashing of the line indicator downward.

DATA Button

This button is used to input the digit data and to select the data.

Rear



❶ SYNCHRO EDIT Jack

This is an input jack for simple editing (mini stereo jack). To edit with this jack, use the system equipped with a Sync Edit Output Jack, such as AG-7450 (with AG-S745) or AG-450.

Note:
Be sure to set the Framing Selector to "OFF" and the Automatic Back Space Selector to "ON" by ON-SCREEN mode.

❷ CAMERA REMOTE Jack

Used to connect the remote control cable from the video camera.
With the signal at low, recording pause mode can be set and the VISS signal can be recorded.
By setting ON-SCREEN, this jack can be used as an input jack for the command to record the VISS signal.

❸ REC REMOTE Jack

Used to record the video and audio signals from the master VTR when the unit simultaneously dubbing several VTRs (up to 100 VTRs maximum).
The recording mode can be set with the signal at low. STOP, EJECT, AUTO-REW, AUTO-REW EJECT and canceling REC REMOTE can be set by ON-SCREEN.

❹ Time Code Input/Output Jack

This jack is used to record and playback time code singal.

IN: Connect this jack to the output jack of a time code generator when you wish to record time code signal.

OFF: Connect this jact to the input jack of a time code reader and play back time code signal.

Note:
Be sure to set the Audio CH2 Selector to "TIME CODE" by ON-SCREEN mode.

❺ Audio Input (CH1/CH2) Jacks

These are the audio input jacks for two channels (CH1 and CH2). They accept signal from external audio equipment such as a tape recorder, record player, etc.

❻ Hi-Fi Sound Input (CH1/CH2) Jacks

These input jacks are intended exclusively for Hi-Fi sound recording.

❼ Audio Output (CH1/CH2) Jacks

Connect these jacks to audio (stereo, etc.) equipment using audio cable. You can select either Normal Audio or Hi-Fi Sound using the Audio Output Selector (㊱ on front panel).

❽ Hi-Fi Sound Output (CH2) Jacks

This output jack is intended exclusively for Hi-Fi sound.

❾ Audio Monitor Output Jack

You can obtain the audio output selected by Audio Monitor Selector ㉟ from this jack.

❿ RF Converter (option)

⓫ EXT SYNC Input Connector

To synchronize the unit with the external reference synchronizing signal, connect the composite synchronizing signal of the external system's reference synchronizing signal generator to this connector.

⓬ Video Input Connector

⓭ S-VIDEO Input Connector

⑭ **Video Output Connector**

⑮ **S-VIDEO Output Connector**

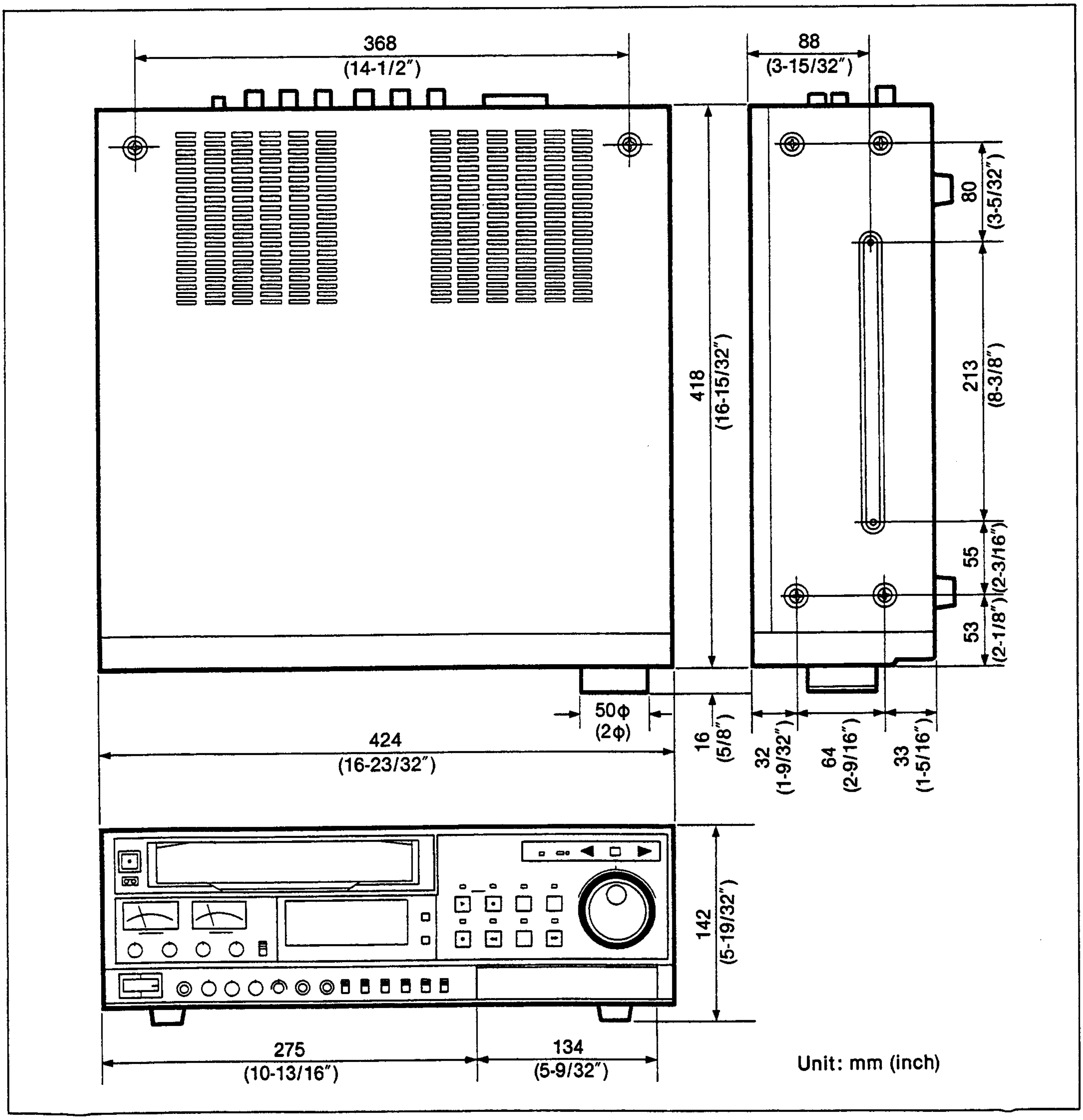
⑯ **Remote Control Connector (option)**

When you wish to operate the unit from a remote location, connect the optional Interface Adaptors to this section. Connect RS-232C Interface Adaptor (AG-IA232) when desired to remote by remote controller AG-A730. Connect 34Pin Interface Adaptor (AG-IA34) when using remote controller AG-A600 remote search controller NV-A505 or editing controllers AG-A750, AG-A650, NV-A500, NV-A960.

Note:

Selection of the Editing Controller can be set with the Controller Selector by ON-SCREEN mode.

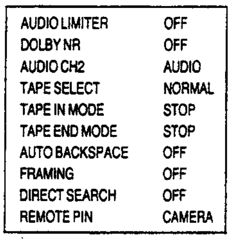
DIMENSIONS


368
(14-1/2")
88
(3-15/32")
418
(16-15/32")
80
(3-5/32")
213
(8-3/8")
55
(2-3/16")
53
(2-1/8")
50ϕ
(2ϕ)
424
(16-23/32")
16
(5/8")
32
(1-9/32")
64
(2-9/16")
33
(1-5/16")
142
(5-19/32")
275
(10-13/16")
134
(5-9/32")
Unit: mm (inch)

Initial Setting (ON-SCREEN)

AG-7330 can confirm and set the initial setting visually by ON-SCREEN mode.

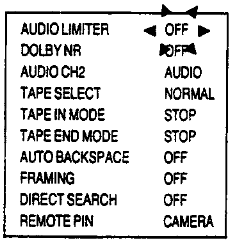
When desired to display the initial setting on the TV monitor, press the SCREEN DISPLAY and the DOWN Buttons simultaneously. The following screen will appear.



AUDIO LIMITER	OFF
DOLBY NR	OFF
AUDIO CH2	AUDIO
TAPE SELECT	NORMAL
TAPE IN MODE	STOP
TAPE END MODE	STOP
AUTO BACKSPACE	OFF
FRAMING	OFF
DIRECT SEARCH	OFF
REMOTE PIN	CAMERA

Audio Limiter Selector

Press the DATA Button to select "ON" or "OFF".



AUDIO LIMITER	◄ OFF ►
DOLBY NR	OFF
AUDIO CH2	AUDIO
TAPE SELECT	NORMAL
TAPE IN MODE	STOP
TAPE END MODE	STOP
AUTO BACKSPACE	OFF
FRAMING	OFF
DIRECT SEARCH	OFF
REMOTE PIN	CAMERA

ON: To minimize distortion at peak levels set the Audio Limiter Selector to "ON". This permits the average level to be set higher for better signal to noise ratio. (In recording.)

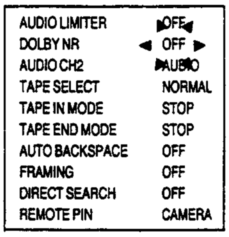
OFF: This permits maximum dynamic range to be recorded, but the level must be set low enough so that peaks do not cause objectionable distortion.

Notes:

- The Audio Limiter Selector controls both channels simultaneously.
- When howling is caused by increasing the volume, set the sound volume of the TV monitor to a lower setting.
- After adjusting each channel to an appropriate level, set the Audio Limiter to "ON".

Dolby NR Selector

Press the DOWN Button. The "DOLBY NR" line indication will flash. Press the DATA Button to select "ON" or "OFF".



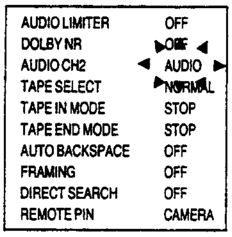
AUDIO LIMITER	OFF
DOLBY NR	◄ OFF ►
AUDIO CH2	AUDIO
TAPE SELECT	NORMAL
TAPE IN MODE	STOP
TAPE END MODE	STOP
AUTO BACKSPACE	OFF
FRAMING	OFF
DIRECT SEARCH	OFF
REMOTE PIN	CAMERA

When the Dolby NR is set to "ON" during recording or playback, the Dolby NR Lamp lights. The Dolby NR system is activated, and the sound with less noise is recorded or played back.
Refer to the table below for Dolby NR applications.

During playback / During recording	**Dolby NR "ON"**	**Dolby NR "OFF"**
Dolby NR "ON"	Normal Sound (Less noise)	Treble is emphasized
Dolby NR "OFF"	Treble is attenuated	Normal sound (Noise same)

Audio CH2 Selector

Press the DOWN Button. The "AUDIO CH2" line indication will flash. Press the DATA Button to select "AUDIO" or "TIME CODE".



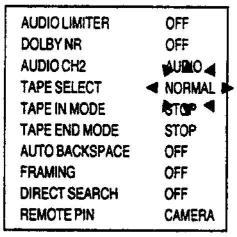
AUDIO LIMITER	OFF
DOLBY NR	OFF
AUDIO CH2	◄ AUDIO ►
TAPE SELECT	NORMAL
TAPE IN MODE	STOP
TAPE END MODE	STOP
AUTO BACKSPACE	OFF
FRAMING	OFF
DIRECT SEARCH	OFF
REMOTE PIN	CAMERA

TIME CODE: When using the time code signal.
The Audio CH2 sound track will be muted.

AUDIO: When using audio signal.

TAPE Selector

Press the DOWN Button. The "TAPE SELECT" line indication will flash. Press the DATA Button to select "NORMAL" or "E240".



AUDIO LIMITER	OFF
DOLBY NR	OFF
AUDIO CH2	AUDIO
TAPE SELECT	◄ NORMAL ►
TAPE IN MODE	STOP
TAPE END MODE	STOP
AUTO BACKSPACE	OFF
FRAMING	OFF
DIRECT SEARCH	OFF
REMOTE PIN	CAMERA

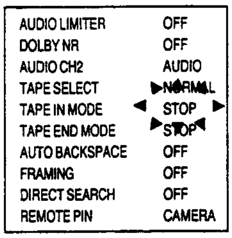
This selector is used to match time countdown circuits to the type of tape used.

E240: For use with the NV-E240 and NV-T160 tape.
NORMAL: For use with other tapes.

Note:
When playing back NTSC 4.43 VHS tapes, "E240" indication will display "T160".

TAPE IN MODE Selector

Press the DOWN Button. The "TAPE IN MODE" line indication will flash. Press the DATA Button to select the mode.



AUDIO LIMITER	OFF
DOLBY NR	OFF
AUDIO CH2	AUDIO
TAPE SELECT	▸NORMAL
TAPE IN MODE	◄ STOP ►
TAPE END MODE	▸STOP◂
AUTO BACKSPACE	OFF
FRAMING	OFF
DIRECT SEARCH	OFF
REMOTE PIN	CAMERA

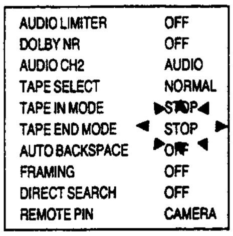
This selector is to select the VTR function mode when a cassette tape is inserted.

The indication will change "STOP"→"REW"→"PAUSE"→"PLAY" each time the DATA Button is pressed.

TAPE END MODE Selector

This selector is to select the VTR function mode at the tape end.

Selectable from stop mode, eject mode, automatic rewind and automatic rewind then eject mode.

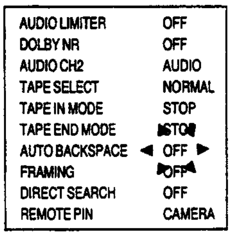


AUDIO LIMITER	OFF
DOLBY NR	OFF
AUDIO CH2	AUDIO
TAPE SELECT	NORMAL
TAPE IN MODE	▸STOP◂
TAPE END MODE	◄ STOP ►
AUTO BACKSPACE	▸OFF◂
FRAMING	OFF
DIRECT SEARCH	OFF
REMOTE PIN	CAMERA

Press the DOWN Button. The "TAPE END MODE" line indication will flash. Press the DATA Button to select the mode.

Automatic Back Space Selector

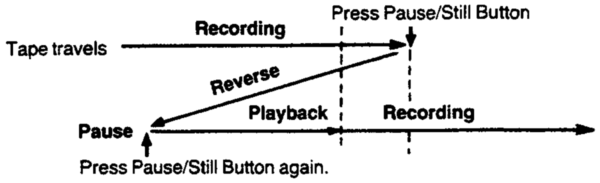
This Auto Back space function is very convenient for use with video cameras which have remote pause capabilities. The automatic backspace function is operational when "ON" is selected. when the Pause/Still Button is pushed during recording, the tape is rewound slightly and set to the pause mode. When the Pause/Still Button is released, recording is made over the previous signals while the tape advances.



AUDIO LIMITER	OFF
DOLBY NR	OFF
AUDIO CH2	AUDIO
TAPE SELECT	NORMAL
TAPE IN MODE	STOP
TAPE END MODE	▸STOP◂
AUTO BACKSPACE	◄ OFF ►
FRAMING	▸OFF◂
DIRECT SEARCH	OFF
REMOTE PIN	CAMERA

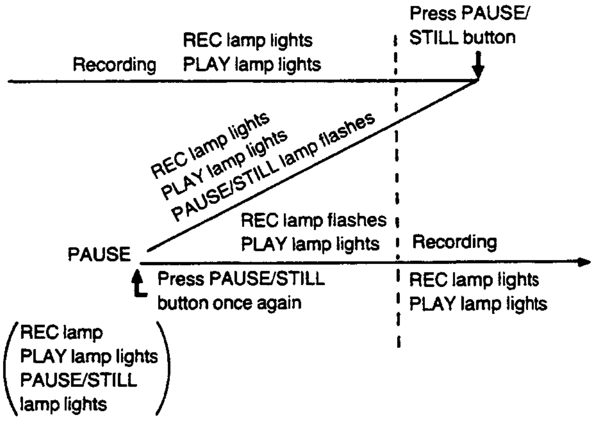
Press the DOWN Button. The "AUTO BACKSPACE" line indication will flash.
Press the DATA Button to select "ON" or "OFF"

•When the Auto Back Space Selector has been set to "ON".

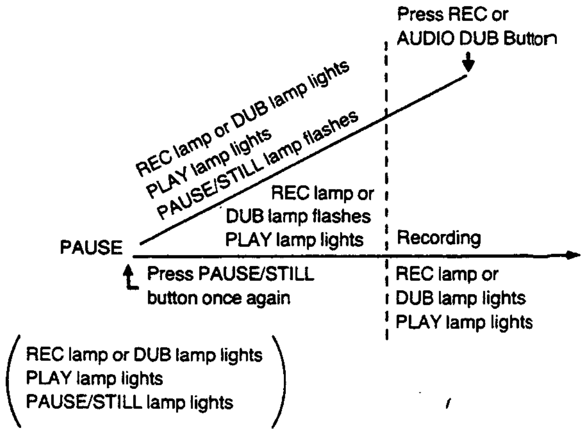

Press Pause/Still Button
Recording
Tape travels
Reverse
Playback
Recording
Pause
Press Pause/Still Button again.

Note:
The reverse and playback time will change depending on the Framing Selector (ON-SCREEN mode).
ON: It will take 4.8 seconds.
OFF: It will take 2.2 seconds.

- ■ When the PAUSE/STILL Button is pressed during recording, the button's lamp will light or flash in the following way:

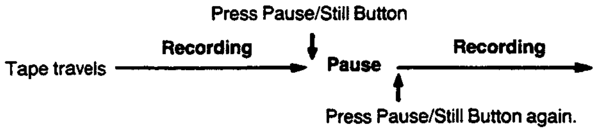

Press PAUSE/
STILL button
REC lamp lights
PLAY lamp lights
Recording
REC lamp lights
PLAY lamp lights
PAUSE/STILL lamp flashes
REC lamp flashes
PLAY lamp lights
PAUSE
Recording
Press PAUSE/STILL
button once again
REC lamp lights
PLAY lamp lights
REC lamp
PLAY lamp lights
PAUSE/STILL
lamp lights

- ■ When REC or AUDIO DUB Button is pressed during still mode, the button's lamp will light or flash in the following way:


Press REC or
AUDIO DUB Button
REC lamp or DUB lamp lights
PLAY lamp lights
PAUSE/STILL lamp flashes
REC lamp or
DUB lamp flashes
PLAY lamp lights
PAUSE
Recording
Press PAUSE/STILL
button once again
REC lamp or
DUB lamp lights
PLAY lamp lights
REC lamp or DUB lamp lights
PLAY lamp lights
PAUSE/STILL lamp lights

Note:
In the case of audio dubbing, the AUDIO DUB lamp will light or flash instead of REC lamp.

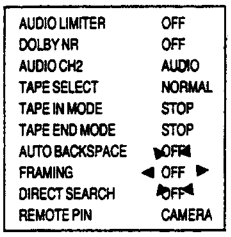
- When the Auto Back Space Selector has been set to "OFF".



Note:
When the Auto Back space Selector has been set to "OFF", noise will appear at the paused portion during playback, but this is not a malfunction.

Framing Selector

Press the DOWN Button.
The "FRAMING" line indication will flash.
Press the DATA Button to select "ON" or "OFF".



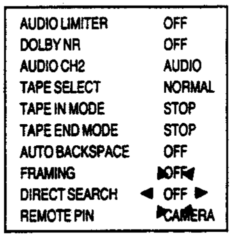
AUDIO LIMITER	OFF
DOLBY NR	OFF
AUDIO CH2	AUDIO
TAPE SELECT	NORMAL
TAPE IN MODE	STOP
TAPE END MODE	STOP
AUTO BACKSPACE	OFF
FRAMING	◀ OFF ▶
DIRECT SEARCH	OFF
REMOTE PIN	CAMERA

Framing occurs when the selector is set to "ON".

Direct Search Selector

This function allows the performance of direct search operation without pressing the JOG/SHTL Button.

1. Press the DOWN Button. The "DIRECT SEARCH" line indication will flash.
2. Press the DATA Button to set "ON" or "OFF"

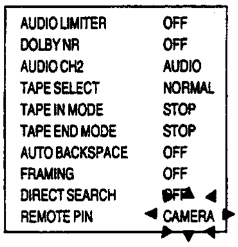


AUDIO LIMITER	OFF
DOLBY NR	OFF
AUDIO CH2	AUDIO
TAPE SELECT	NORMAL
TAPE IN MODE	STOP
TAPE END MODE	STOP
AUTO BACKSPACE	OFF
FRAMING	OFF
DIRECT SEARCH	◀ OFF ▶
REMOTE PIN	CAMERA

Remote Pin Selector

This selector is to select the function of the Camera Remote Connector.

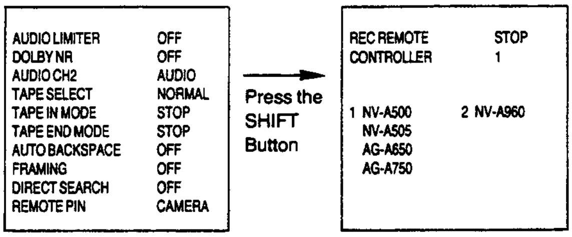
1. Press the DOWN Button. The "REMOTE PIN" line indication will flash.
2. Press the DATA Button to select "CAMERA" or "VISS".



AUDIO LIMITER	OFF
DOLBY NR	OFF
AUDIO CH2	AUDIO
TAPE SELECT	NORMAL
TAPE IN MODE	STOP
TAPE END MODE	STOP
AUTO BACKSPACE	OFF
FRAMING	OFF
DIRECT SEARCH	OFF
REMOTE PIN	◀ CAMERA ▶

CAMERA: Used for Camera Remote Connector.
VISS: Used for forcibly writing VISS signal.

To shift the initial setting display to the next menu, press the SHIFT Button.

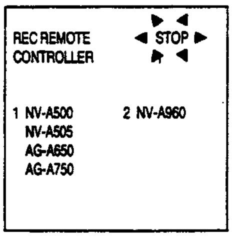


AUDIO LIMITER	OFF
DOLBY NR	OFF
AUDIO CH2	AUDIO
TAPE SELECT	NORMAL
TAPE IN MODE	STOP
TAPE END MODE	STOP
AUTO BACKSPACE	OFF
FRAMING	OFF
DIRECT SEARCH	OFF
REMOTE PIN	CAMERA

REC REMOTE	STOP
CONTROLLER	1
1 NV-A500 NV-A505 AG-A650 AG-A750	2 NV-A960

REC REMOTE Selector

Press the DATA Button to select the mode.
Each time the button is pressed, the indicator will change as shown below.
"STOP"→"EJECT"→"PAUSE"→"REW-EJECT"→"STOP"...



REC REMOTE	◀ STOP ▶
CONTROLLER	
1 NV-A500 NV-A505 AG-A650 AG-A750	2 NV-A960

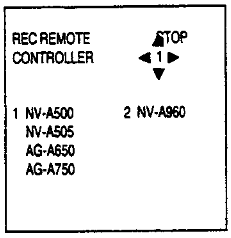
The following kinds of functions are possible with this selector.

- During recording, the VTR is automatically stopped.
- During recording, the VTR automatically stops on Pause/Still.
- During recording, the VTR is automatically stopped, and then the cassette tape is automatically ejected.
- During recording, the tape is automatically rewound to its beginning, the unit stops, and the cassette tape is automatically ejected.

Controller Selector

This selector is used to match command electronics to the type of 34P Editing Controller used.

1. Press the DOWN Button. The "CONTROLLER SELECT" line indication will flash.
2. Press the DATA Button to select "1" or "2".

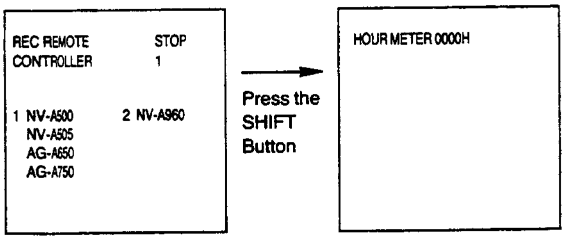


```
REC REMOTE      ▲TOP
CONTROLLER     ◄1►
                 ▼

1 NV-A500     2 NV-A960
  NV-A505
  AG-A650
  AG-A750
```

1: Set the selector to this position when using Remote Controller AG-A600, Editing Controller AG-A750, AG-A650, NV-A500 or remote Search controller NV-A505.
2: Set the selector to this position when using Editing Controller NV-A960.

To shift the display to the next menu, press the SHIFT Button.



```
REC REMOTE      STOP
CONTROLLER      1

1 NV-A500     2 NV-A960
  NV-A505
  AG-A650
  AG-A750
```

```
HOUR METER 0000H
```

The hour meter informs you of the time the cylinder has been operating.
This helps you decide when to clean the unit or replace parts in order to ensure the best performance.
For details, consult your local service center.

Note:
No matter which menu is displayed, when the SCREEN DISPLAY Button is pressed, the normal picture will appear.

VHS INDEX SEARCH SYSTEM (VISS)

It is possible to locate the beginning of a desired programme in forward or reverse direction in the Fast Forward or Rewind mode by skipping up to 99 index signals.
To be able to use the VHS Index Search function, index signals must be recorded on the tape.

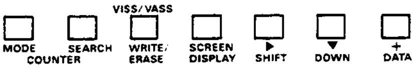
- When recording index signals, space them so that the interval between two signals is more than 2 minutes in normal playback time.
- In the following cases, the VHS Index Search function may not work correctly:
  - If the tape has portions without any recording.
  - If a recording was replaced by another recording.

Recording Index Signals

Index signals can be recorded during recording or on already recorded tapes.

Settings: •Press the MODE Button to select the VISS mode.
•Press th SCREEN DISPLAY Button to display the VISS WRITE menu.

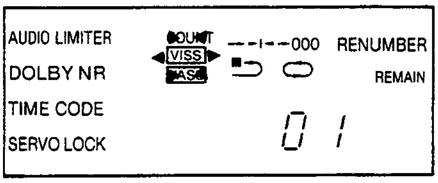
- An index signal is automatically recorded at the position where the recording is started by pressing the Record Button.



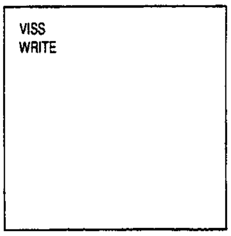
Use the buttons above and perform the following operations by ON-SCREEN mode and the tape counter.

To Record Index Signals during Recording

1. Press the MODE Button to light the VISS mode indicator in the tape counter.

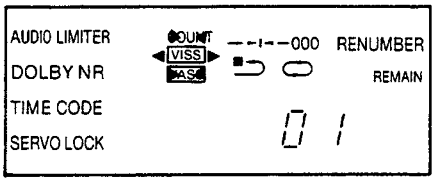


2. Press the SCREEN DISPLAY Button to display the VISS WRITE mode.



Note:
Be sure that the " →▶ " and " →▶I◀ " indicator in the tape counter is not lighted, the OPERATION Selector at "LOCAL" and the SENSOR REC Switch at "OFF".

3. Press the WRITE/ERASE Button at a point that you may want to locate again later using the VHS Index Search function.
   Notes:
   - Be sure that the TV system is PAL or CCIR.
   - Do not insert tapes with broken removable tabs.



The VISS mode indicator in the tape counter flashes.
The VISS mode indicator stops flashing when the index signal has been recorded.

Notes:
- If the operation step 3 is performed while the VTR is in the recording pause mode, the pause mode will be canceled, the recording will restart and the index signal will be recorded.
- Press the SCREEN DISPLAY Button for normal picture.

To Record Index Signals on a Recorded Tape

Play back the tape to locate a point that you may want to locate again later using the VHS Index Search function, and put the VTR at that point in the still playback mode.

1. Put the VTR in the pause/still mode where you desire to locate again later.
2. Press the MODE Button and light the VISS mode indicator in the tape counter.
3. Press the SCREEN DISPLAY Button and display the VISS WRITE mode.
4. Press the WRITE/ERASE Button.
   The VISS mode indicator flashes.
   Playback starts and the VISS mode indicator stops flashing after the index signal recording has been made.

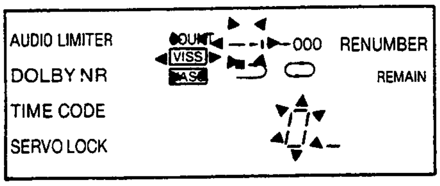
While an Index Signal is Being Recorded
- The VISS mode indicator flashes for about 3 seconds when an index signal is recorded during recording and for about 8 seconds when an index signal is recorded on an already recorded tape.
- While recording an index signal on a recorded tape, no other operation can be performed and the sound from the normal (mono) sound track will be muted while the VISS mode Indicator is flashing.

If Index Signal Cannot Be Recorded
It is not possible to record index signal on a tape which had the tab removed. To be able to record these signals, cover the tab hole with two layers of adhesive tape. After the signals are recorded, strip off the adhesive tape to prevent accidental erasure of the recording.

VHS Index Search Function

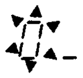
•VISS SEARCH PLAY mode

1. Press the MODE Button to light the VISS mode indicator in the tape counter.
2. Press the SEARCH Button to light the "→▶" indicator in the tape counter.

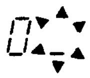

AUDIO LIMITER
DOLBY NR
TIME CODE
SERVO LOCK
COUNT
VISS
VASS
000
RENUMBER
REMAIN

3. Press the DATA Button and the SHIFT Button to select the desired Index. The number is shown in the tape counter (up to 99).

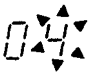
Example: When setting number "04"



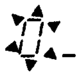
1) Press the SHIFT Button.
The tens digit remains zero and the unit's place will light up.



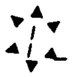
2) Press the DATA Button four times till "4" appears.



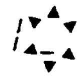
Example: When setting number "13".



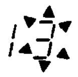
1) Press the DATA Button once. The tens digit will display "1".



2) Press the SHIFT Button. The unit's place will light up.

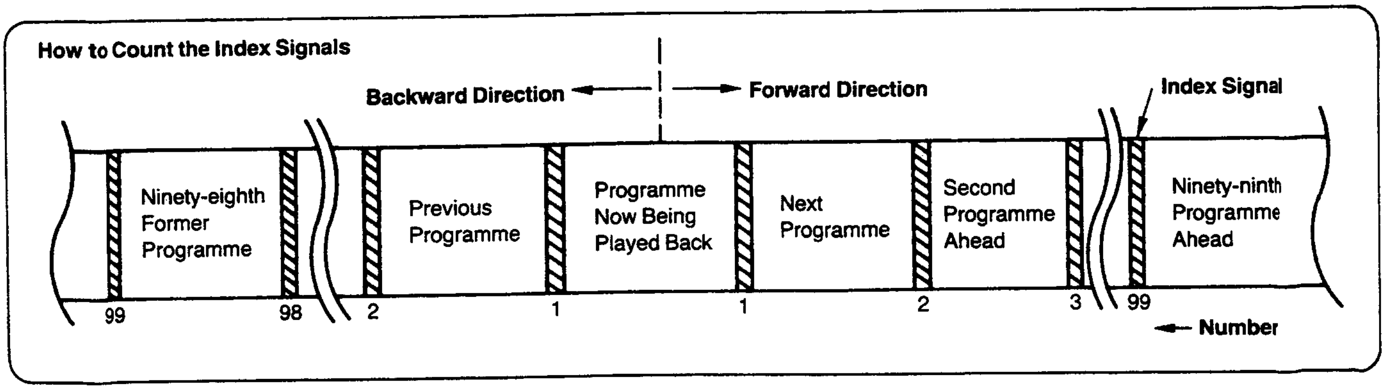


3) Press the DATA Button repeatedly till "3" appears.



4. When setting completes, press the SHIFT Button.
5. Press the REW or FF Button to start the VHS Index Search function.

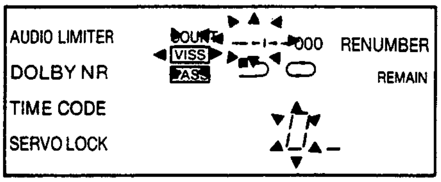
- •Every time an index signal is skipped the number in the tape counter decreases by one.
- •When the preset address is reached, the normal playback will start.
- •To abort the Index Search function midway, press the SEARCH Button and light off the "→▶" indicator.


How to Count the Index Signals
Backward Direction
Forward Direction
Index Signal
Ninety-eighth Former Programme
Previous Programme
Programme Now Being Played Back
Next Programme
Second Programme Ahead
Ninety-ninth Programme Ahead
99
98
2
1
1
2
3
99
Number

•VISS SEARCH PAUSE mode

1. Press the MODE Button to light the VISS mode indicator in the tape counter.

2. Press the SEARCH Button to light the " →▶I◀" indicator in the tape counter.



3. Use the DATA and SHIFT Buttons to select the desired Index (up to 99).
   The number is shown on the tape counter.
   (Index setting is to be done the same way as "VISS SEARCH PLAY mode".)

4. When setting is completed, press the SHIFT Button.

5. Press the REW or FF Button to start the VHS Index Search function.

- •Every time an index signal is skipped the number in the tape counter decreases by one.
- •When the preset index signal is reached, the VTR will go into pause still mode.
- •To abort the Index Search function midway, press the SEARCH Button and light off the "→▶I◀" indicator.

If the Index Search function is started extremely close to the beginning of the next programme or from the beginning of the tape, the first Index may not be counted.

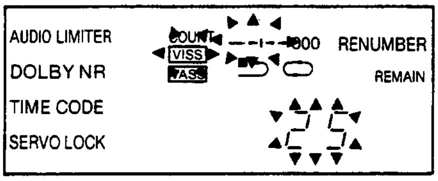
When the VHS Index Search Function is Operated from the Still Playback Mode
The VTR will stop the tape in the still playback mode when the designated tape position is reached.

Deleting Index Signals

It is possible to delete unnecessary index signals.
Locate an index signal you want to delete and then press the ERASE Button.

Example: When deleting the index signal "25".

1. Follow the operations 1~5 of "VISS SEARCH PAUSE mode."
   1) Light the VISS mode indicator by the MODE Button and the " →▶I◀ " indicator by the SEARCH Button in the tape counter.
   2) Press the DATA Button till "2" indicates in the tape counter.
      Press the SHIFT Button.
   3) Press the DATA Button repeatedly till "5" indicates in the tape counter.
      Press the SHIFT Button.



   4) Press the REW or FF Button and put the VTR in the pause still mode at the desired index signal.

2. Press the WRITE/ERASE Button.
   The VTR will go into playback mode and deleting starts.

When the WRITE/ERASE Button is Pressed
Playback starts.
When the signal to be deleted is reached, the VISS mode indicator starts flashing. While this indicator is flashing (for about 15 seconds), the deleting operation is being performed. When the deleting is completed, the normal playback continues.

- •While the VISS mode indicator is flashing, no other operation can be performed, and the sound from the normal (mono) sound track will be muted.
- •Be sure that the TV system is PAL or CCIR.
- •Do not insert tapes with broken removable tabs.

When the WRITE/ERASE Button is Kept Pressed
While the WRITE/ERASE Button is kept pressed, the VISS mode Indicator is flashing, indicating the next index signal can now be deleted.

VHS ADDRESS SEARCH SYSTEM (VASS)

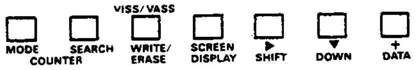
Locate the beginning of a desired programme by selecting the number of the address signal recorded on the tape at that position.
To be able to use the VHS Address Search function, address signals must be recorded on the tape.

- When recording address signals, space them so that the interval between two signals is more than 2 minutes in normal playback time.

Recording Address Signals

Address signals (numbered search signals) can be recorded during recording or on already recorded tapes.
A desired 4-digit number (0000-9999) can be assigned to each address signal.

- For optimum convenience when later locating desired programmes, write down the numbers assigned to the recorded address signals on the cassette label.

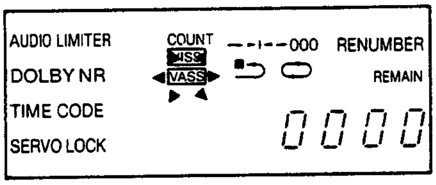

VISS/VASS
MODE
SEARCH
COUNTER
WRITE/ ERASE
SCREEN DISPLAY
▶ SHIFT
▼ DOWN
+ DATA

Use the buttons above and perform the following operations by ON-SCREEN mode and the tape counter.

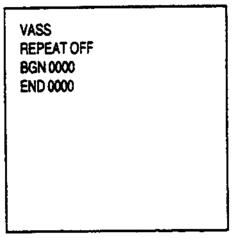
To Record Address Signals during Recording

Example: When recording the address signal "1964".

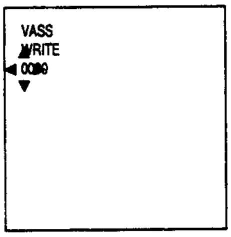
1. Press the MODE Button and light the VASS mode indicator in the tape counter.


AUDIO LIMITER
DOLBY NR
TIME CODE
SERVO LOCK
COUNT
VISS
◀VASS▶
▶ ◀
--I--000
RENUMBER
REMAIN
0000

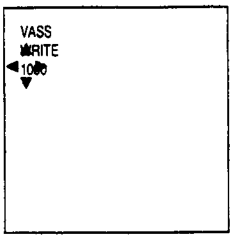
2. Press the SCREEN DISPLAY Button.


VASS
REPEAT OFF
BGN 0000
END 0000

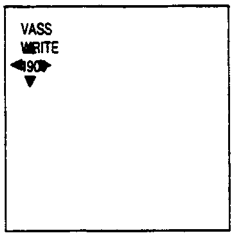
3. Press the SHIFT Button and display the VASS WRITE menu.


VASS
WRITE
◀ 0000
▼

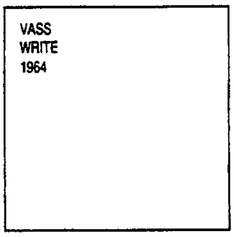
4. Press the DATA Button to display "1". Press the SHIFT Button.


VASS
WRITE
◀1000
▼

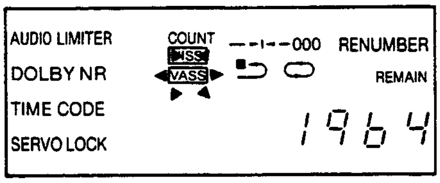
5. Press the DATA Button repeatedly to display "9". Press the SHIFT Button.


VASS
WRITE
◀190▶
▼

6. Continuously set "6" and "4" with the DATA and SHIFT Buttons. When completed, press the SHIFT Button.


VASS
WRITE
1964

7. Press the WRITE/ERASE Button at a point that you may want to locate again later using the VHS Address Search function. Recording starts and the VASS mode indicator in the tape counter flashes.


AUDIO LIMITER
DOLBY NR
TIME CODE
SERVO LOCK
COUNT
VISS
◀VASS▶
▶ ◀
--I--000
RENUMBER
REMAIN
1964

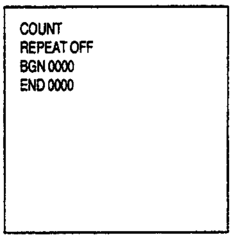
If the operation step 7 is performed while the VTR is in the recording pause mode, the pause mode will be canceled, the recording will restart and the address signal will be recorded.

To Record Address Signals on a Recorded Tape

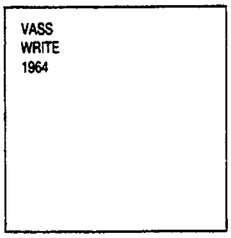
Play back the tape to locate a point that you may want to locate again later using the VHS Address Search function, and put the VTR in the still playback mode.

1. Put the VTR in the pause still mode where you desire to locate again later.

2. Press the MODE Button and light the VASS mode indicator in the tape counter.
3. Press the SCREEN DISPLAY Button.


COUNT
REPEAT OFF
BGN 0000
END 0000

4. Press the SHIFT Button and display the VASS WRITE menu.
5. Use the DATA and SHIFT Buttons to select the desired address (0000–9999)


VASS
WRITE
1964

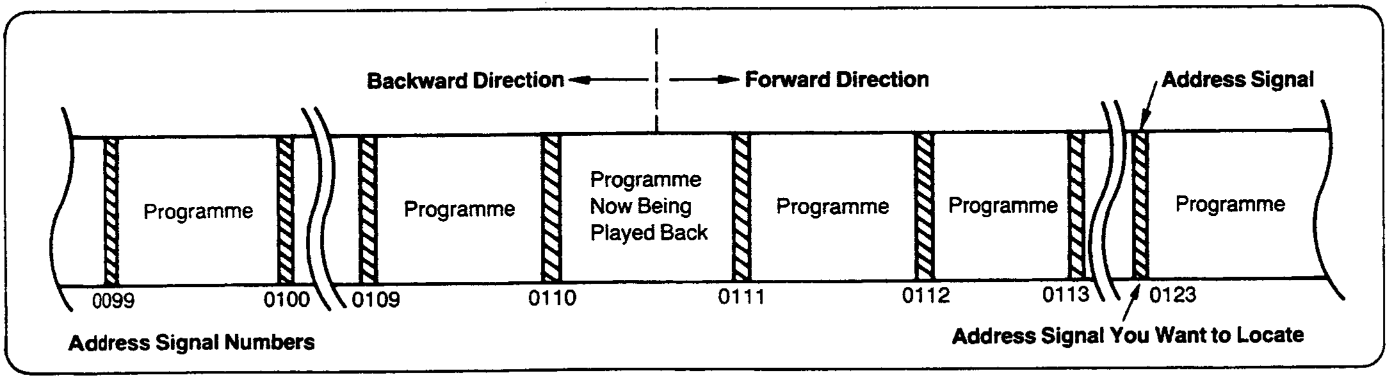
6. Press the WRITE/ERASE Button.
   The VASS mode indicator flashes.
   Playback starts and the VASS mode indicator stops flashing after the address signal recording has been made.
   - Be sure that the TV system is PAL or CCIR.
   - Do not insert tapes with broken removable tabs.

While an Address Signal is Being Recorded

- The VASS mode indicator flashes for about 6 seconds when an address signal is recorded during recording and for about 8 seconds when an address signal is recorded on an already recorded tape.
- While recording an address signal on a recorded tape, no other operation can be performed and the sound from the normal (mono) sound track will be muted while the VASS mode Indicator is flashing.

If Address Signal Cannot Mode Recorded

It is not possible to record address signal on a tape which had the tab removed. To be able to record these signals, cover the tab hole with two layers of adhesive tape. After the signals are recorded, strip off the adhesive tape to prevent accidental erasure of the recording.

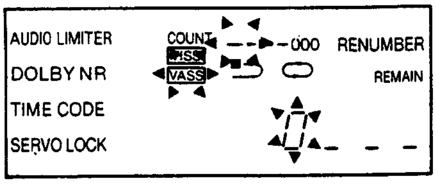

Backward Direction
Forward Direction
Address Signal
Programme
Programme
Programme Now Being Played Back
Programme
Programme
Programme
0099
0100
0109
0110
0111
0112
0113
0123
Address Signal Numbers
Address Signal You Want to Locate

VHS Address Search Function

•VASS SEARCH PLAY mode

1. Press the MODE Button to light the VASS mode indicator in the tape counter.

2. Press the SEARCH Button to light the "→▶" indication in the tape counter.

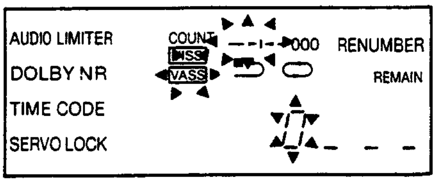

AUDIO LIMITER
DOLBY NR
TIME CODE
SERVO LOCK
COUNT
VISS
VASS
000
RENUMBER
REMAIN

3. Input the number of the address signal you want to locate with the DATA and SHIFT Buttons.

4. Press the REW or FF Button to start the VHS Address Search function.
   - The counter will indicate "0000" and each time an address signal is found, its number will be displayed.
   - To abort the VHS Address Search function midway, press the SEARCH Button and light off the "→▶" indicator.
   - When preset address signal is reached, the VTR will go into play mode.

•VASS SEARCH PAUSE mode

1. Press the MODE Button to light the VASS mode indicator in the tape counter.
2. Pres the SEARCH Button to light the "→▶I◀" indicator in the tape counter.


AUDIO LIMITER
DOLBY NR
TIME CODE
SERVO LOCK
COUNT
VISS
VASS
000
RENUMBER
REMAIN

3. Use the DATA and SHIFT Buttons to select the desired address.
4. When setting is completed, press the SHIFT Button.
5. Press the REW or FF Button to start the VHS Address Search function.
   When the preset address signal is reached, the VTR will go into pause still mode.

- The counter will indicate "0000" and each time an address signal is found, its number will be displayed.
- To abort the VHS Address Search function midway, press the SEARCH Button and light off the " →▶I◀ " indicator.

When the VHS Address Search Function is Operated from the Still Playback Mode.
The VTR will stop the tape in the still playback mode when the designated tape position is reached.

If You Want to Know the Number of an Address Signal Recorded on the Tape

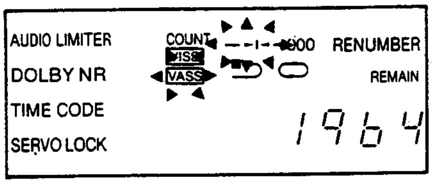
Press the PLAY, FF or REW Button during VASS mode. Each time an address signal is found, its number will be displayed in the tape counter.

When the Preset Address Signal is not Found

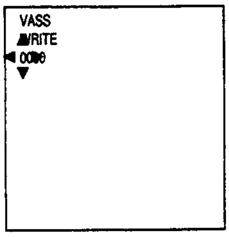
When the tape reaches its end during fast forward, the VTR will rewind to its beginning if you set the TAPE END MODE Selector (ON-SCREEN mode) to "REW".

To Change the Number of an Address Signal

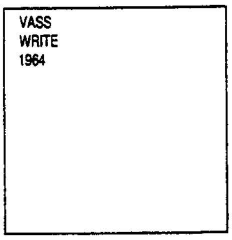
1. Follow the steps 1~5 of "VASS SEARCH PAUSE mode" and set the VTR into pause still mode at the address signal which you desire to change.



2. Clear the search mode.
3. Press the SCREEN DISPLAY Button.
4. Press the SHIFT Button and display the VASS WRITE menu.



5. Input the desired new number with the DATA and SHIFT Buttons.



6. Press the WRITE/ERASE Button. The VASS mode indicator will flash.
   The VTR will go into playback mode and renumbering starts.

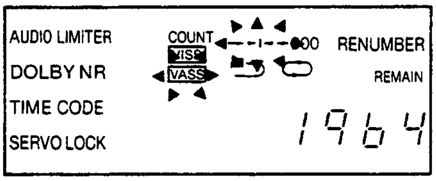
- The VASS mode indicator will stop flashing after about 15 seconds and the VTR will go into playback mode when the number is changed. The sound from the normal (mono) sound track will be muted.

Deleting Address Signals

It is possible to delete unnecessary address signals. Locate an address signal you want to delete and press the WRITE/ERASE Button.

Example: When deleting the address signal "1964".

1. Follow the operations 1~5 of "VASS SEARCH PAUSE mode".
   1) Light the VASS mode indicator by the MODE Button and the " →▶I◀ " indicator by the SEARCH Button in the tape counter.
   2) Use the DATA and SHIFT Buttons and display "1964" in the tape counter.



   3) Press the REW or FF Button and put the VTR in the pause still mode at the desired address signal.

2. Press the WRITE/ERASE Button.
   The VTR will go into playback mode and deleting starts.

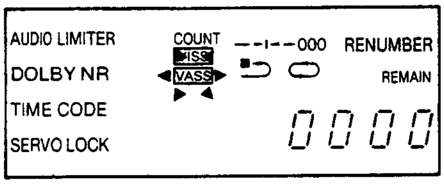
When the WRITE/ERASE Button is Pressed
Playback starts.
When the signal to be deleted is reached, the VASS mode indicator starts flashing. While this indicator is flashing (for about 15 seconds), the deleting operation is being performed. When the deleting is completed, the normal playback continues.

- While the VASS mode indicator is flashing, no other operation can be performed, and the sound from the normal (mono) sound track will be muted.

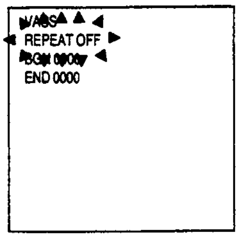
When the WRITE/ERASE Button is Kept Pressed
While the WRITE/ERASE Button is kept pressed, the VASS mode address indicator is flashing, indicating the next signal can now be deleted.

VASS Repeat Playback

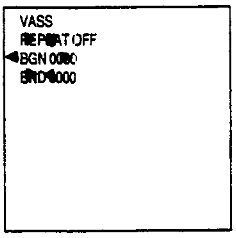
1. Press the MODE Button to select VASS mode.


AUDIO LIMITER
DOLBY NR
TIME CODE
SERVO LOCK
COUNT
VISS
VASS
--ı--000
RENUMBER
REMAIN
0000

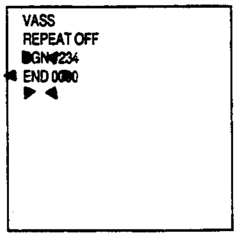
2. Press the SCREEN DISPLAY Button.


VASS
REPEAT OFF
BGN 0000
END 0000

3. Press the DATA Button and select "1 TIME" or "CONTINUE".
   Each time the DATA Button is pressed, the indicator will change "OFF"→"1 TIME"→"CONTINUE".
4. Press the DOWN Button.
   The "BGN" line indicator will flash.
   Use the DATA and SHIFT Buttons and set the desired beginning address signal.


VASS
REPEAT OFF
BGN 0000
END 0000

5. Press the DOWN Button.
   The "END" line indicator will flash.
   Use the DATA and SHIFT Buttons and set the desired end address signal.


VASS
REPEAT OFF
BGN 1234
END 0000

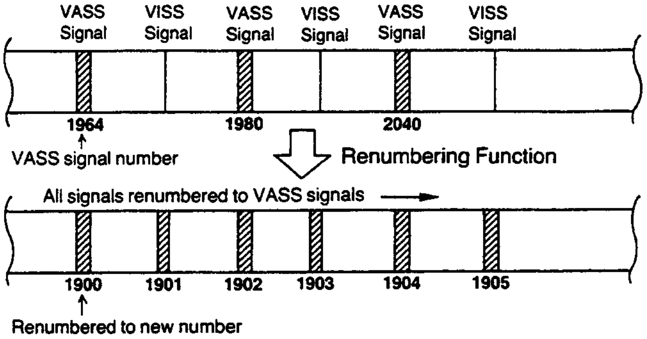
6. Press the REW or FF Button to start the VASS repeat playback function.

Note:
When the mode is set to "COUNT", VASS repeat mode will automatically set to "OFF".

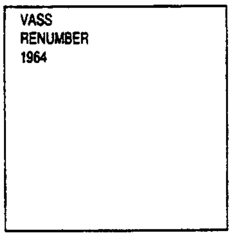
VASS Renumbering Function

This VTR has a renumbering function that can automatically change index and address signals to address signals with serial numbers starting with any desired number.

Example: Renumbering index and address signals starting with the address signal "1964" to address signals starting with the number "1900".


VASS Signal
VISS Signal
VASS Signal
VISS Signal
VASS Signal
VISS Signal
1964
1980
2040
VASS signal number
Renumbering Function
All signals renumbered to VASS signals
1900
1901
1902
1903
1904
1905
Renumbered to new number

1. Locate the position where you want to start the renumbering function.
   Select the address signal "1964" and locate it.
2. Press the REW Button and rewind the tape from the "1964" position for 2~3 seconds.
3. Put the VTR in the still playback mode.
4. Press the SCREEN DISPLAY Button, then the SHIFT Button twice to display the VASS renumbering menu.


VASS
RENUMBER
1964

Note:
The displayed address signal is the same as the VASS WRITE menu.

5. Press the DOWN Button. "1964" will light up. Input "1900" with the DATA and the SHIFT Buttons.
6. Press the WRITE/ERASE Button.
   The VTR will start the renumbering function with the displayed address signal as the renumbering start address signal.

Notes:
- To abort the renumbering function midway, press the Stop Button.
- When the tape reaches the end, the tape will automatically follow the preset tape end mode (ON-SCREEN mode).

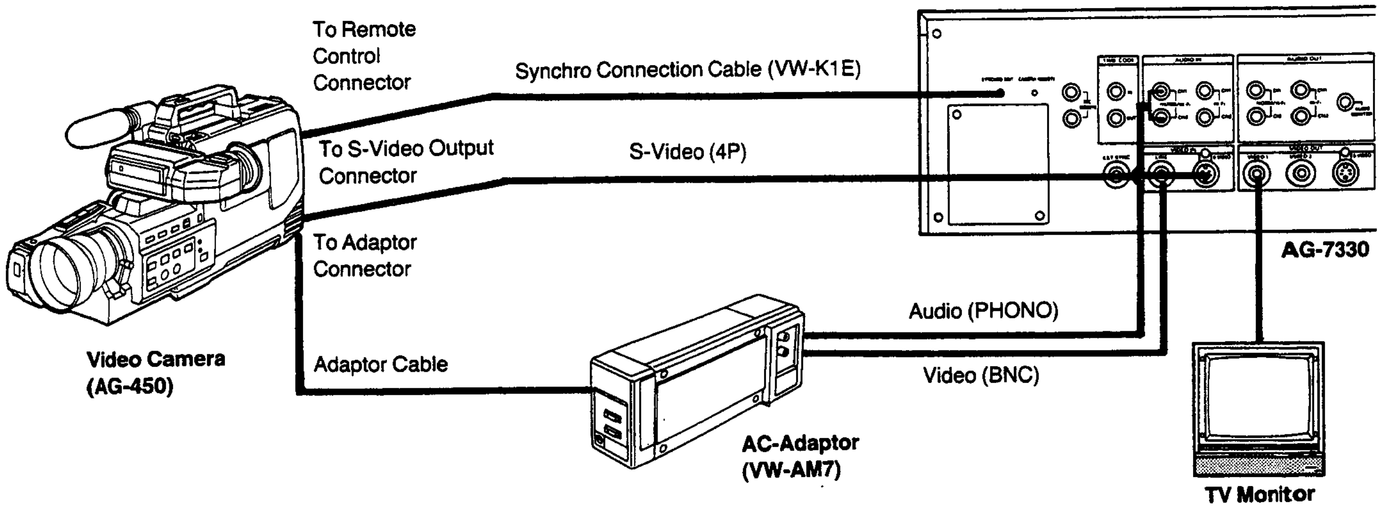
When the Renumbering Starts
The tape will automatically be fast-forwarded and the signals will automatically be changed to address signals.
- While the signals are being changed to address signals, no other operation can be performed and the sound from the normal (mono) sound track will be muted.

To Start Renumbering from the Beginning of the Tape

Put the VTR at the beginning of the tape in the still playback mode, and perform the operation steps 3~5.

Synchro Edit Function

Connecting the AG-7330 by synchro cable to a video camera (AG-450) or VTR (AG-7450 with AG-S745) equipped with a Synchro Edit Function makes it possible to synchronize the editing start and stop of both units.
The playback start and stop of the video camera will be synchronized with the recording start and stop of this VTR.

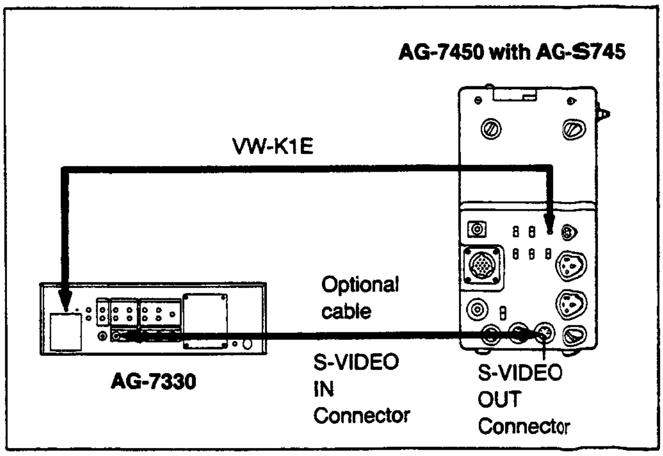

To Remote Control Connector
Synchro Connection Cable (VW-K1E)
To S-Video Output Connector
S-Video (4P)
To Adaptor Connector
AG-7330
Audio (PHONO)
Video Camera (AG-450)
Adaptor Cable
Video (BNC)
AC-Adaptor (VW-AM7)
TV Monitor

Connecting to AG-450, video camera

Preparation
- Set the Framing Selector to "OFF" and the Auto Back Space Selector to "ON" by ON-SCREEN mode.
- Make the necessary connections as shown in the connection diagram.
- Set the Edit Switch of AG-450 to "ON" and the Image Selector of this VTR to "EDIT".

1. Put the VTR in the recording pause mode.
2. Put the video camera in the still playback mode at the point where you want to start editing.
3. Press the Pause/Still Button on the VTR. The video camera changes over to the playback mode and the dubbing will start automatically.

Connecting to AG-7450

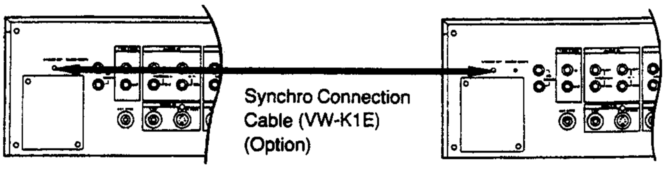

AG-7450 with AG-S745
VW-K1E
Optional cable
AG-7330
S-VIDEO IN Connector
S-VIDEO OUT Connector

1. Set the SYNC Switch of AG-S745 to "ON".
2. Press the PLAY and PAUSE Buttons of AG-7450.

3. Press the REC, PLAY and PAUSE/STILL Buttons on the VTR.
4. Press the Pause/Still Button on the VTR. The video camera changes over to the playback mode and the dubbing will start automatically.
5. When the PAUSE/STILL Button on the VTR is pressed again, the VTR will go into REC PAUSE and AG-7450 will go into still mode.

When editing is completed, press the STOP Button of AG-7330 first and then the video camera's or AG-7450's.

Control Dubbing



When an AG-7330 is used as both recording and playback VTR, the connection shown above makes possible dubbing of index signals, too.
The operation is the same as for ordinary dubbing.

Note:
Be sure to set the mode selector in the tape counter to VISS or VASS when dubbing index or address signals.

INTERFACE ADAPTOR (Option)

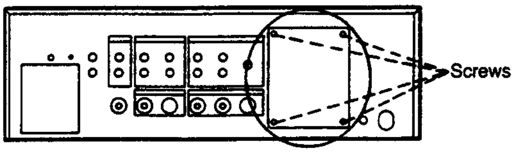
The units listed in the table below can be connected to this VTR if their corresponding Interface Adaptors are installed in the remote control connector's section.

Interface Adaptor	Model No.	Connectable Units (option)		
RS-232C Interface Adaptor	AG-IA232	•AG-A730		
34P Interface Adaptor	AG-IA34	•AG-A750 •NV-A960	•AG-A650 •NV-A505	•NV-A500 •AG-A600

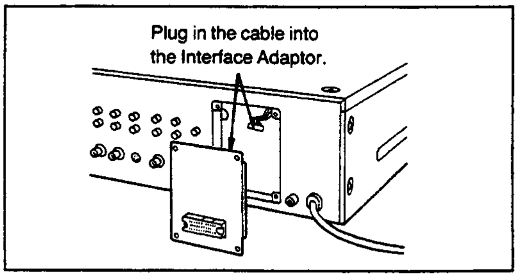
Installation of the Adaptors

Accessories: Screws .... 4 pcs.

1. Untighten the screws and remove the blank panel of the VTR.



2. Connect the desired Interface Adaptor.
   Note:
   Be sure to plug the cable of the VTR into the Interface Adaptor as shown below.



3. Tighten up the screws.

PARTS LOCATION

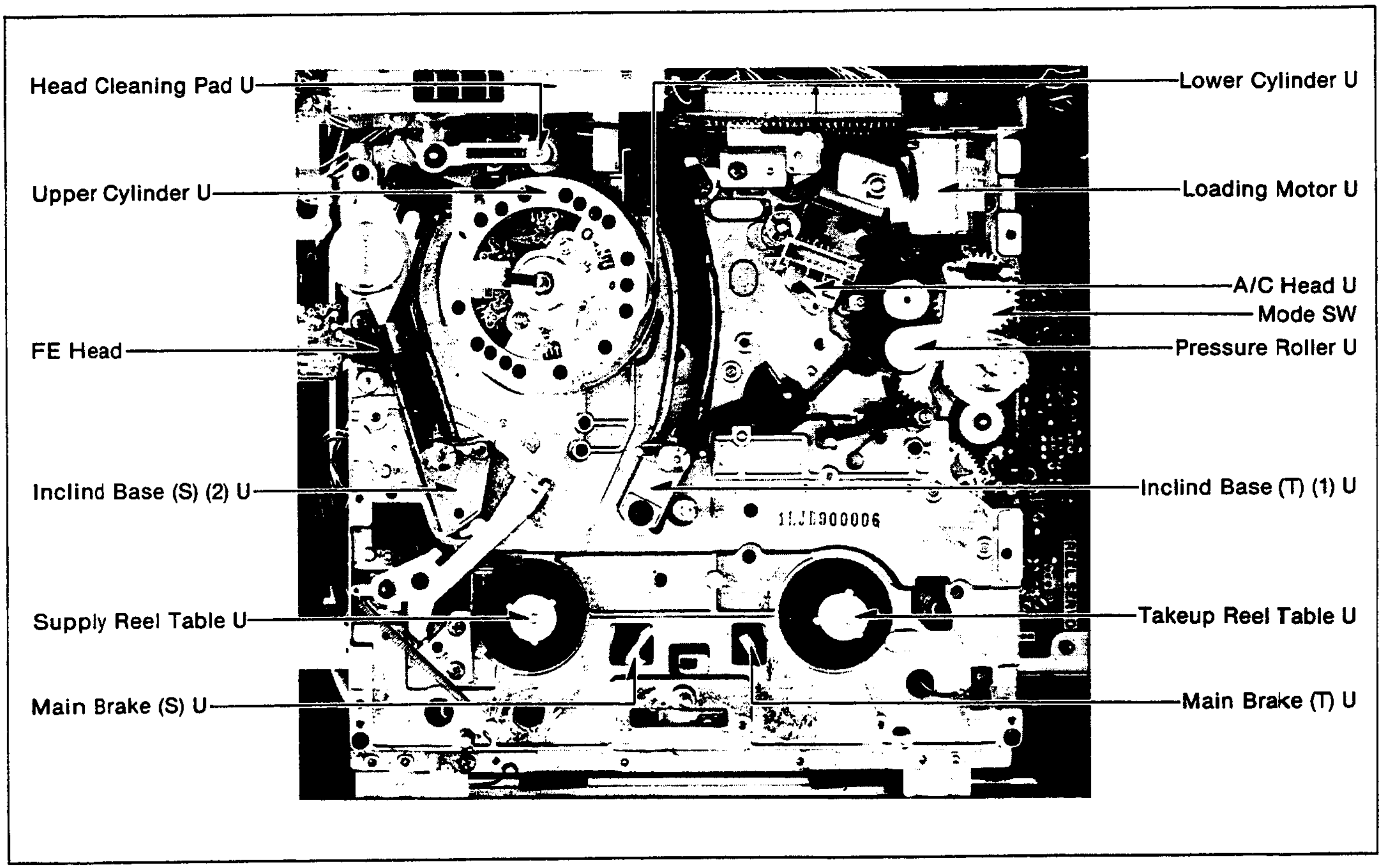

Head Cleaning Pad U
Upper Cylinder U
FE Head
Inclind Base (S) (2) U
Supply Reel Table U
Main Brake (S) U
Lower Cylinder U
Loading Motor U
A/C Head U
Mode SW
Pressure Roller U
Inclind Base (T) (1) U
Takeup Reel Table U
Main Brake (T) U

Figure 1 Top View

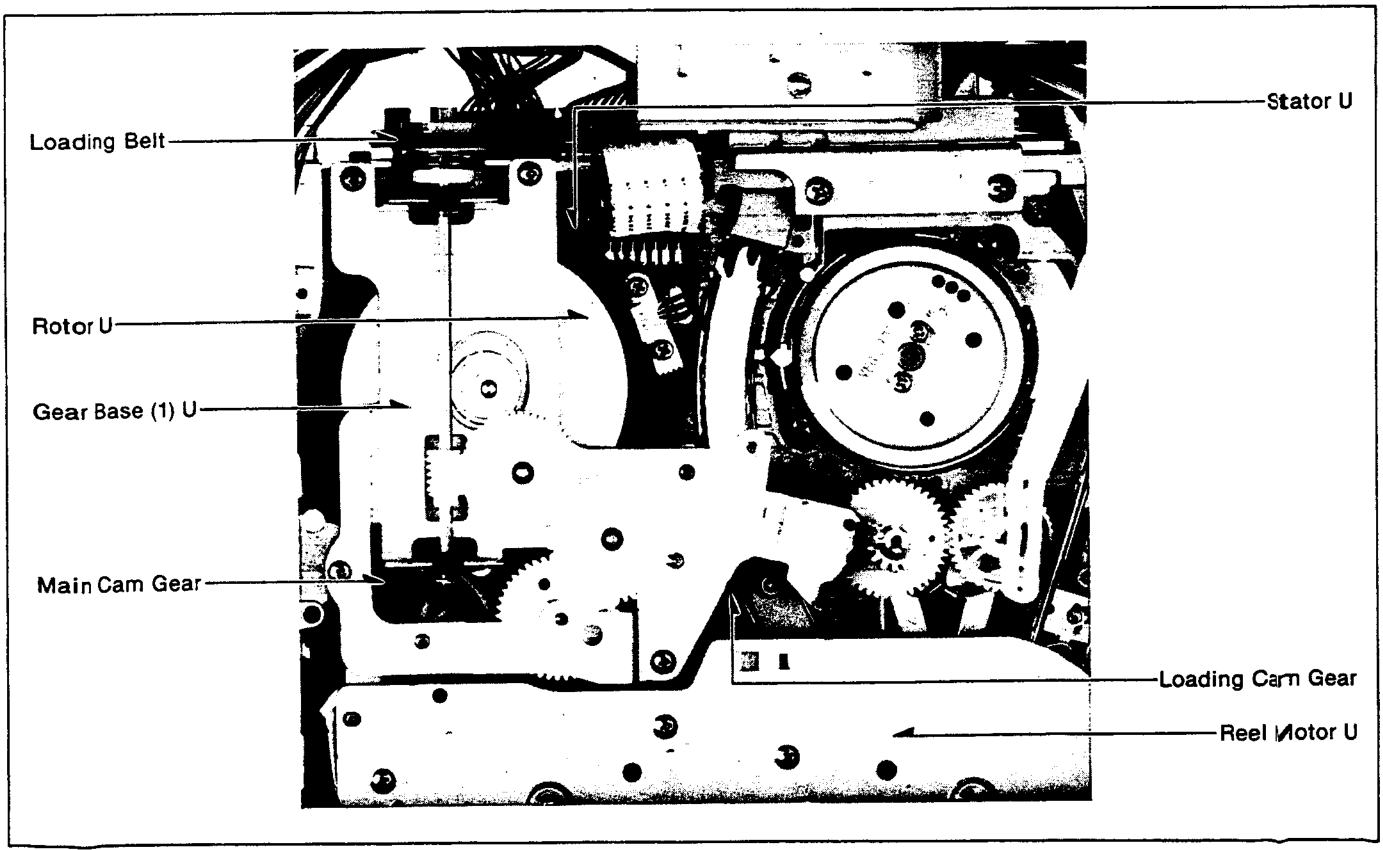

Loading Belt
Rotor U
Gear Base (1) U
Main Cam Gear
Stator U
Loading Cam Gear
Reel Motor U

Figure 2 Bottom View

REGULAR MAINTENANCE

The purpose of periodic maintenance is to preserve the functioning of this machine throughout it's useful life. The user or service dealer should perform these maintenance regularly to ensure that maximum utility is obtained from the machine.

The VCR is a complicated piece of equipment. It contains many belts, rollers, heads etc., which become worn, and deteriorate as time goes by, causing trouble. Dust and dirt will also impede the proper functioning of the machine. In light of this, it is very important that overall maintenance be done according to the maintenance chart to maintain the functions of the VCR, and to avoid accidental problems. This maintenance should also be performed after any repairs are done on the equipment.

The VCR used for business applications requires particular attention for several reasons. The installation conditions and applications are not always the best. Long use times, or poor environmental conditions may adversely affect the lifespan and performance of the machine. Regular maintenance assures that the purchaser obtains the maximum value for his expenditure. Accordingly, the necessity of regular maintenance should be fully explained at the time of sale, as well as during after–sale repairs.

MAINTENANCE CHART

The following periodic maintenance is required to prolong the life of the machine.

Ref. No. IN P/L	Part Name	Hour									
		500	1000	1500	2000	2500	3000	3500	4000	4500	5000
—	Tape Transporters	●	●	●	●	●	●	●	●	●	●
33 (1)	A/C Head U	●	●	●	●	●	●	●	◎	●	●
20 (1)	FE Head	●	●	●	●	●	●	●	◎	●	●
14 (1)	Upper Cylinder U	●	◎	●	◎	●	◎	●	◎	●	◎
12 (1)	Lower Cylinder U	●	●	●	●	●	◎	●	●	●	●
91 (2)	Supply Reel Table U	●	●△	●	◎	●	●△	●	◎	●	●△
90 (2)	Takeup Reel Table U	●	●△	●	◎	●	●△	●	◎	●	●△
96, 99 (2)	Rotor U, Stator U	●	●	●	●	●	●	●	●	●	●
37 (1)	Pressure Roller U	●	●	●	◎	●	●	●	◎	●	●
93 (2)	Main Brake (S) U				◎				◎		
94 (2)	Main Brake (T) U				◎				◎		
81 (2)	Loading Belt				◎				◎		
11 (1)	Loading Motor U								◎		
55 (1)	Inclind Base (S) (2) U		■		■		■		■		◎
61 (1)	Inclind Base (T) (1) U		■		■		■		■		◎
50 (1)	Head Cleaning Pad U		◎		◎		◎		◎		◎
22 (1)	Mode SW								◎		
82 (2)	Reel Motor U								◎		
110 (2)	Loading Cam Gear		■		■		■		■		■
104 (2)	Main Cam Gear		■		■		■		■		■
85 (2)	Gear Base (1) U		■		■		■		■		■

***NOTE:**

Symbol	Maintenance	Requirement	Remark
●	Cleaning	Freon TF, Ethyl-alcohol or Cleaning Liquid (Purchase locally)	Wipe dirt from the parts using soft cloth impregnated with Freon TF or Ethyl-Alcohol. Note: When cleaning rubber parts, avoid using excessive alcohol since it may accelerate deterioration of these parts. After cleaning with alcohol, wipe the alcohol quickly and thoroughly.
◎	Replacement	———	———
△	Lubrication	High Quality Spindle Oil (Purchase Locally)	Supply one or two drops of oil.
■	Greasing	Molytone Grease (MOR265)	Wipe the old grease and apply new grease.

DISASSEMBLY PROCEDURES

1. DISASSEMBLY FLOW CHART

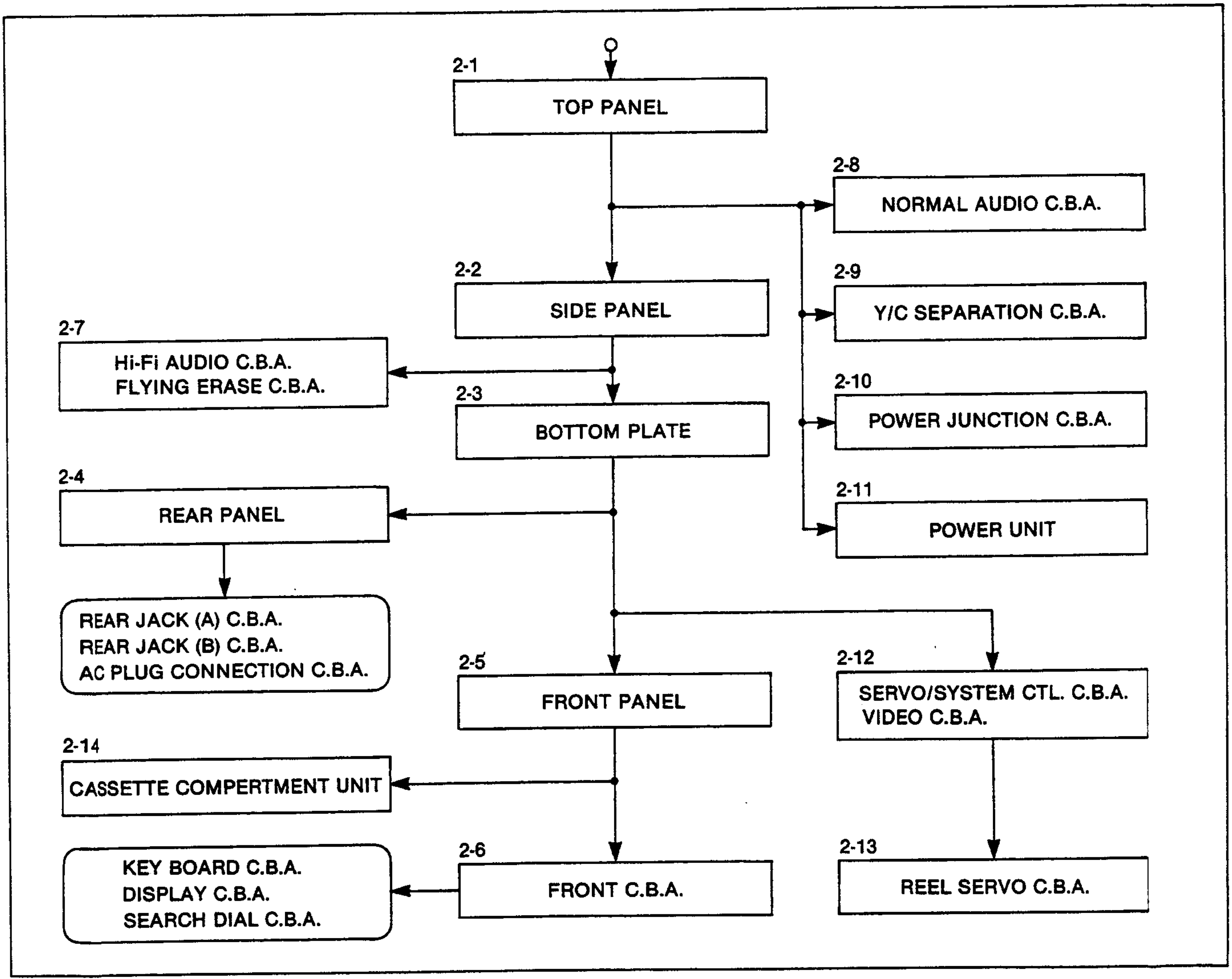

2-1
TOP PANEL
2-8
NORMAL AUDIO C.B.A.
2-2
SIDE PANEL
2-9
Y/C SEPARATION C.B.A.
2-7
Hi-Fi AUDIO C.B.A.
FLYING ERASE C.B.A.
2-3
BOTTOM PLATE
2-10
POWER JUNCTION C.B.A.
2-4
REAR PANEL
2-11
POWER UNIT
REAR JACK (A) C.B.A.
REAR JACK (B) C.B.A.
AC PLUG CONNECTION C.B.A.
2-5
FRONT PANEL
2-12
SERVO/SYSTEM CTL. C.B.A.
VIDEO C.B.A.
2-14
CASSETTE COMPERTMENT UNIT
2-6
KEY BOARD C.B.A.
DISPLAY C.B.A.
SEARCH DIAL C.B.A.
FRONT C.B.A.
2-13
REEL SERVO C.B.A.

Figure D1

The above flow chart describes the order of steps for removing the cabinet parts and certain printed circuit boards in order to gain access to the items needing servicing. To reassemble the unit, follow the steps in reverse order.

2. DETALED DISASSEMBLY METHOD

2–1. Removal of the Top Panel

1. Unscrew the 2 screws (A) on the Top Panel (Figure D2).
2. Carefully lift the rear of the case and slide it off the back of the unit.

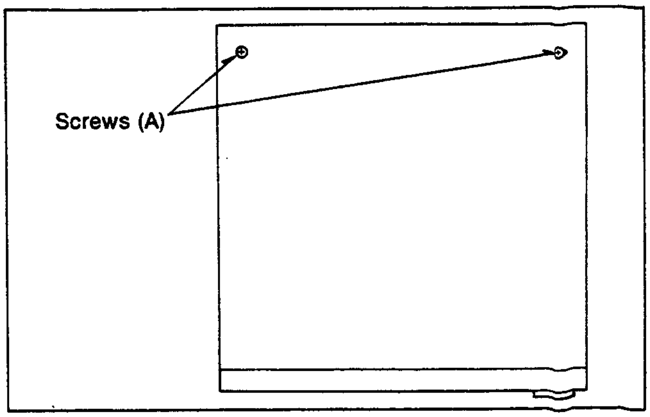


Figure D2

2-2. Removal of the Side Panels

1. Unscrew the 8 screws (B) on the Side Panels (Figure D3).
2. Lift off the Side Panels.

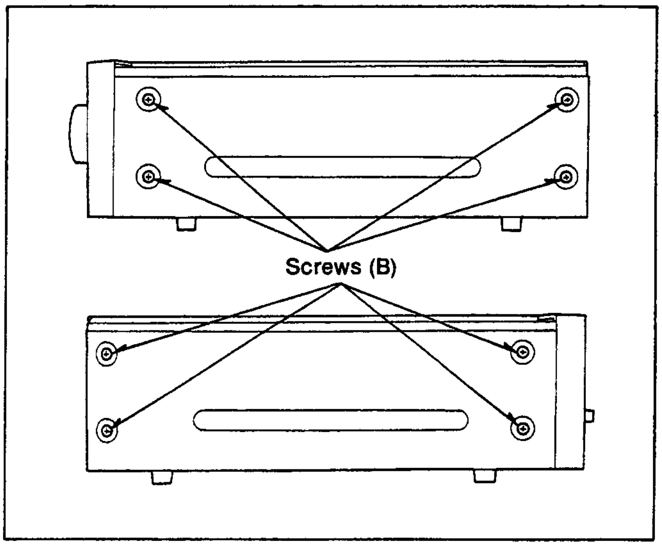


Figure D3

2-3. Removal of the Bottom Plate

1. Unscrew the 8 screws (C).
2. Lift off the Bottom Plate.

*Note:
Do not remove the 4 rubber feet.

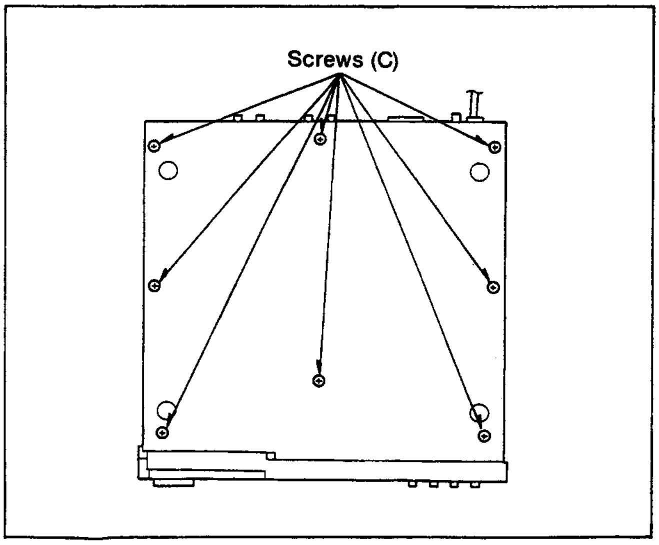


Figure D4

2-4. Removal of the Rear Panel

1. Unscrew the 2 screws (D) on the Rear Panel and the 3 screws (E) on the top of the Rear Panel (Figure D5).
2. Remove the earth wire on the side angle (Figure D5).

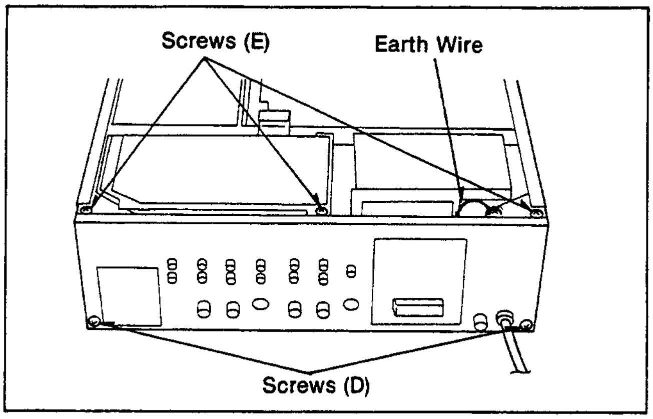

Screws (E)
Earth Wire
Screws (D)

Figure D5

3. Lift the Rear Panel and carefully pull the panel off the unit as shown in Figure D6.

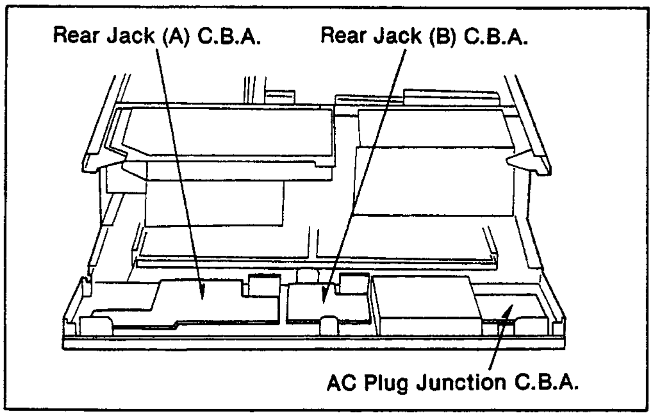

Rear Jack (A) C.B.A.
Rear Jack (B) C.B.A.
AC Plug Junction C.B.A.

Figure D6

2-5. Removal of the Front Panel

1. Unscrew the 4 screws (F) on the Side Panel and a screw (G) on the bottom of the Front Panel (Figure D7 and Figure D8).

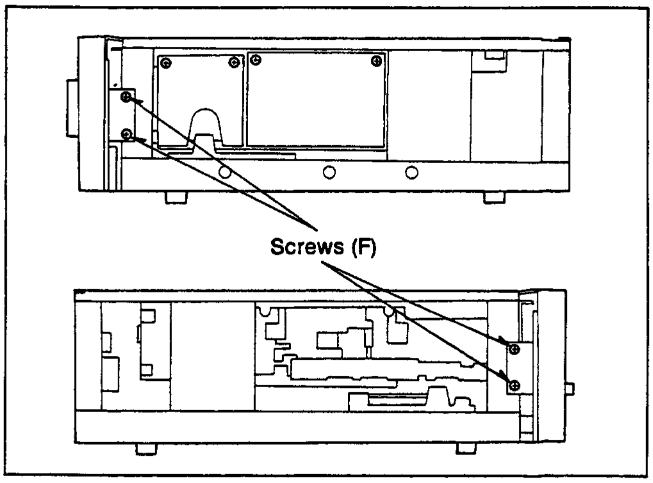


Figure D7

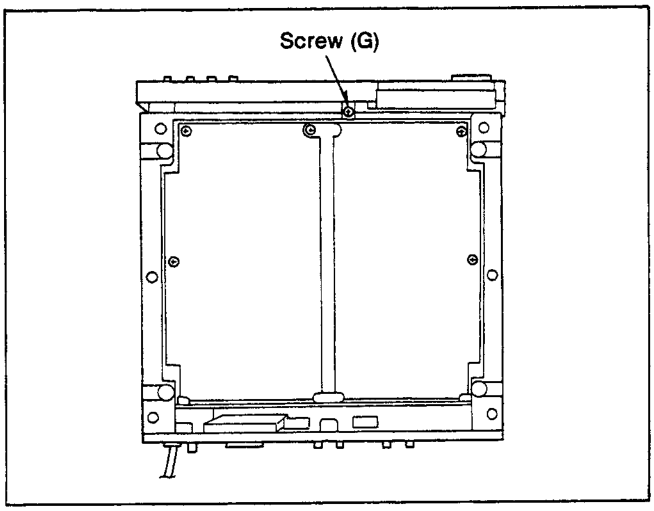


Figure D8

2. Lift the Front Panel and carefully pull the panel off from the unit as shown in Figure D9.

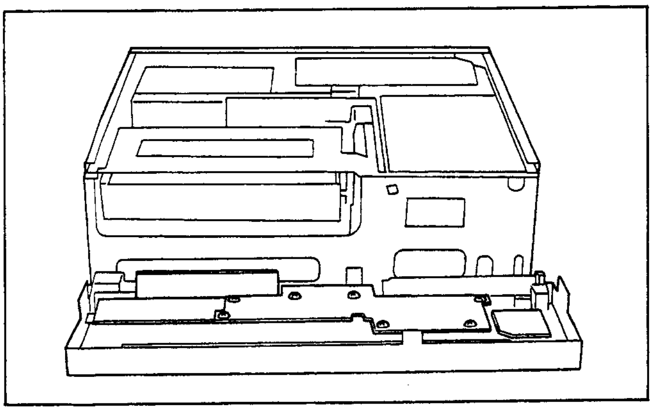


Figure D9

2–6. Removal of the Front C.B.A.

1. Unscrew the 7 screws (H) on the Front C.B.A. (Figure D10) and carefully pull out the Front C.B.A. from the unit.

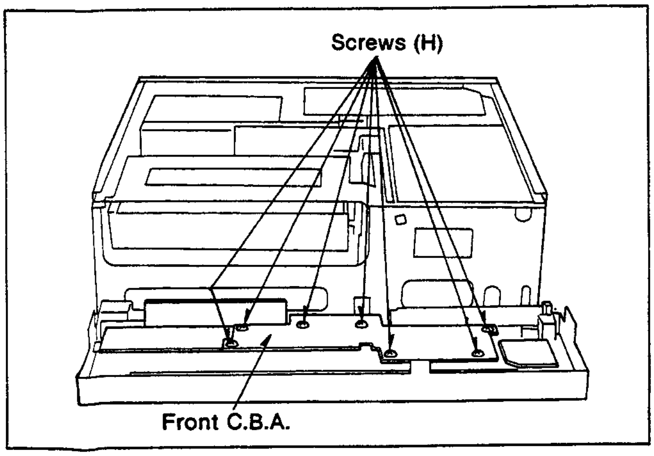

Screws (H)
Front C.B.A.

Figure D10

2–7. Opening of the Hi–Fi Audio C.B.A. and Flying Erase C.B.A.

1. Unscrew the 4 screws (I) on the Hi–Fi Audio C.B.A. and Flying Erase C.B.A. (Figure D11) and open up the Hi–Fi Audio C.B.A. and Flying Erase C.B.A. as shown in Figure D12.

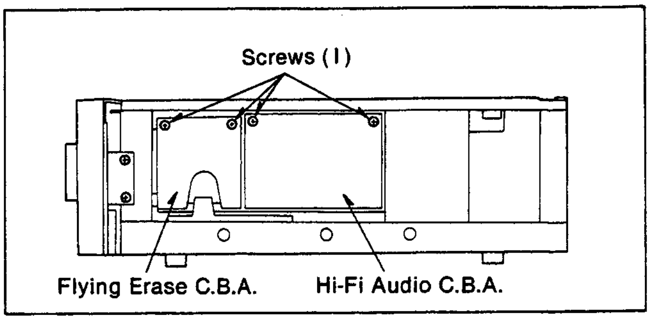

Screws (I)
Flying Erase C.B.A.
Hi-Fi Audio C.B.A.

Figure D11

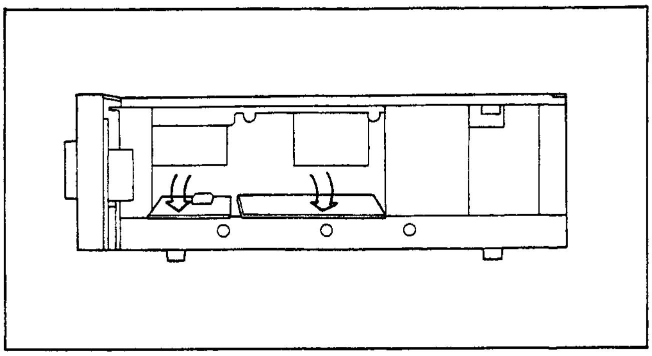


Figure D12

2–8. Opening of the Normal Audio C.B.A.

1. Unscrew the 2 screws (J) on the Normal Audio C.B.A. (Figure D13) and open the Normal Audio C.B.A. as shown in Figure D14.

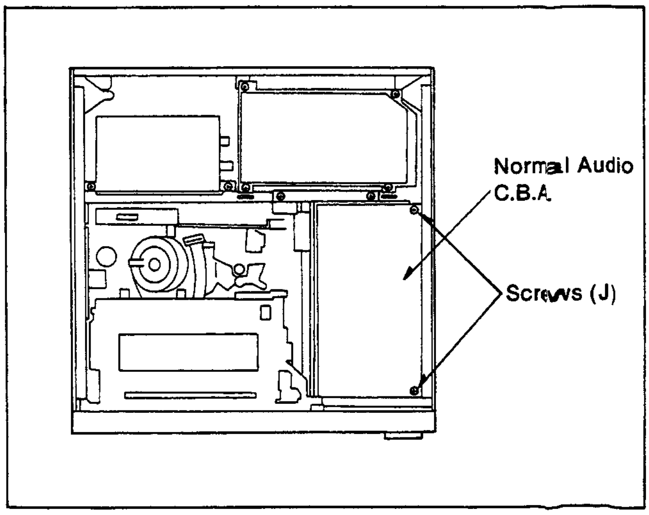

Normal Audio C.B.A.
Screws (J)

Figure D13

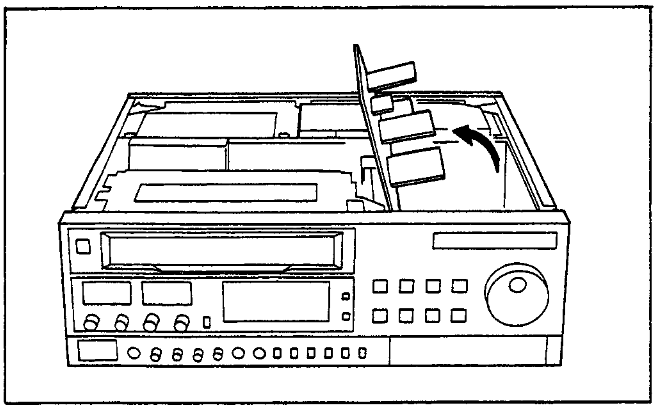


Figure D14

2–9. Removal of the Y/C Separation C.B.A.

1. Unscrew the 4 screws (K) on the Y/C Separation C.B.A. (Figure D15) and carefully lift the Y/C Separation C.B.A. from the unit.
2. Stand the C.B.A. using the C.B.A. standing holes (L) as shown in Figure D15.

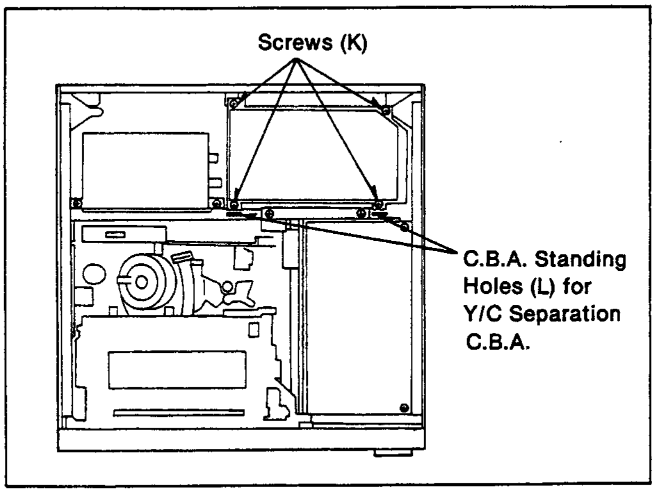

Screws (K)
C.B.A. Standing Holes (L) for Y/C Separation C.B.A.

Figure D15

2–10. Removal of the Power Junction C.B.A.

1. Unscrew the 2 screws (M) (Figure D16) and carefully lift the Power Junction C.B.A.

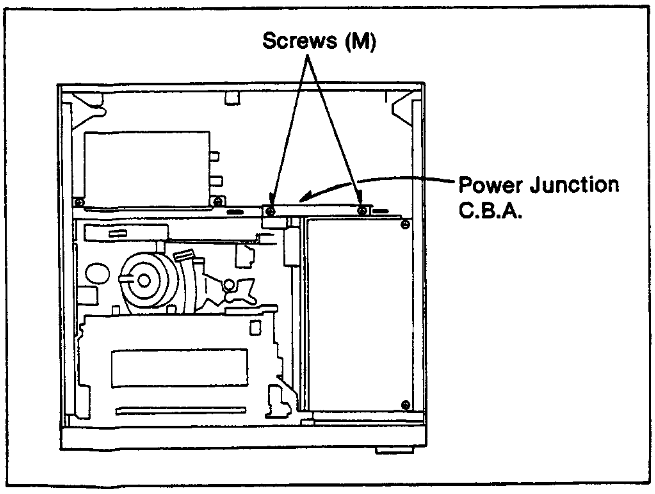

Screws (M)
Power Junction C.B.A.

Figure D16

2–11. Removal of the Power Unit

1. Unscrew the 2 screws (N) on the Power Unit (Figure D17) and pull out the Power Unit from the unit.

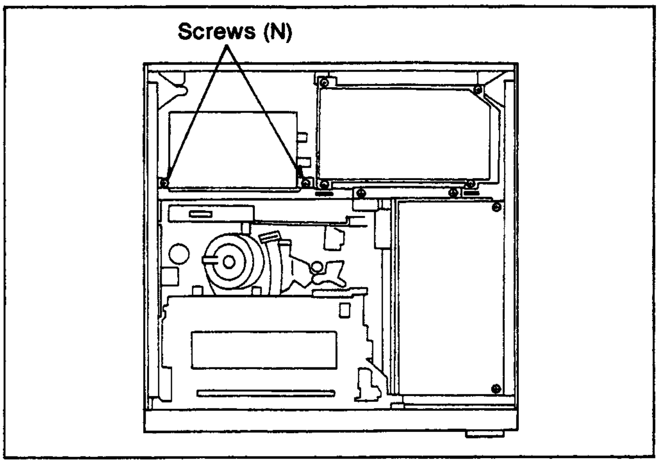


Figure D17

2–12. Opening of the Servo / System CTL. C.B.A. and Video C.B.A.

1. Unscrew the 5 screws (O) on the Servo / System CTL, and Video C.B.As (Figure D18).

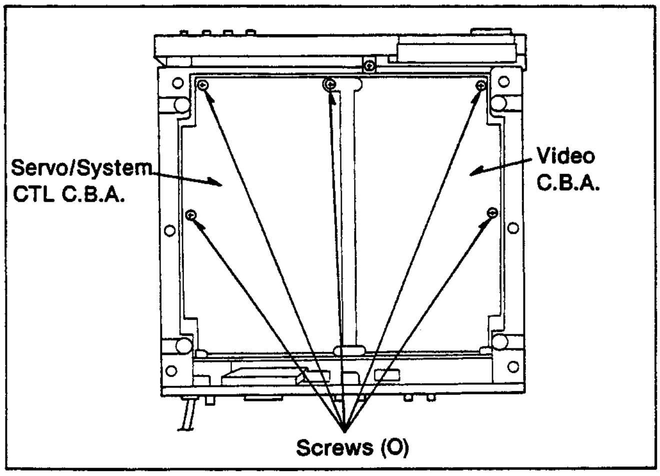

Servo/System CTL C.B.A.
Video C.B.A.
Screws (O)

Figure D18

2. Open up the Servo / System CTL, and Video C.B.As. as shown in Figure D19.

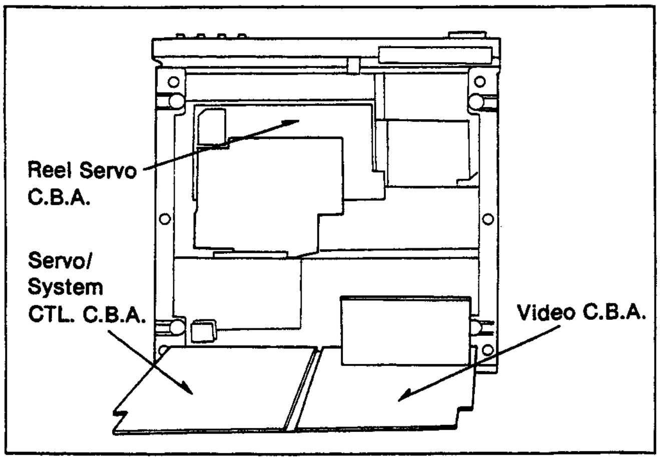

Reel Servo C.B.A.
Servo/ System CTL. C.B.A.
Video C.B.A.

Figure D19

2–13. Opening of the Reel Servo C.B.A.

1. Carefully open up the Shield Plate as shown in Figure D20.

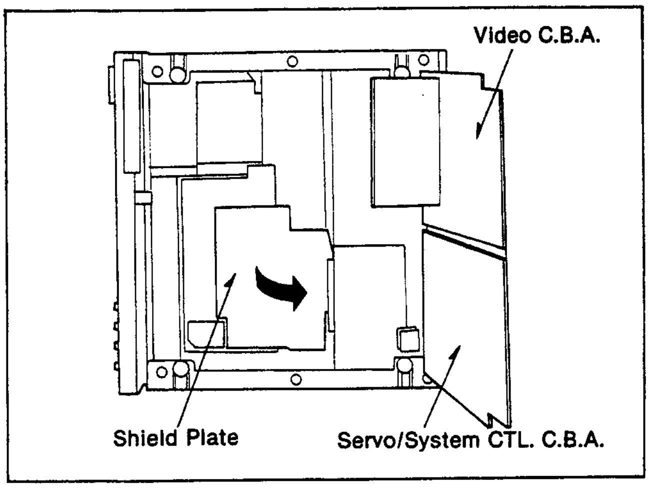

Video C.B.A.
Shield Plate
Servo/System CTL. C.B.A.

Figure D20

2. Unscrew the 2 screws (Q) on the Reel Servo C.B.A. (Figure D21).

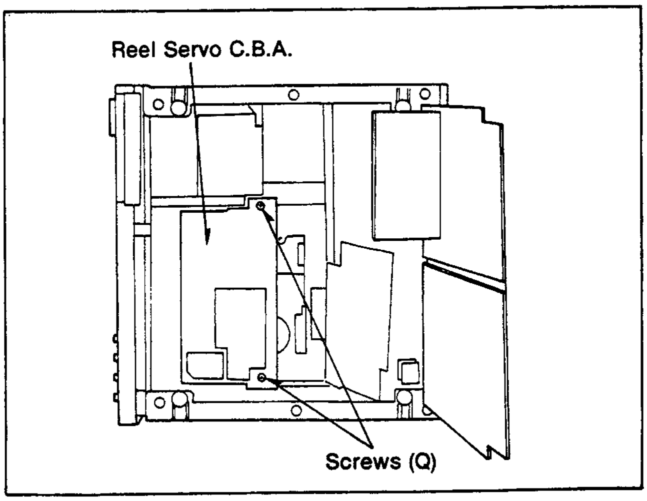

Reel Servo C.B.A.
Screws (Q)

Figure D21

3. Open up the Reel Servo C.B.A. as shown in Figure D22.

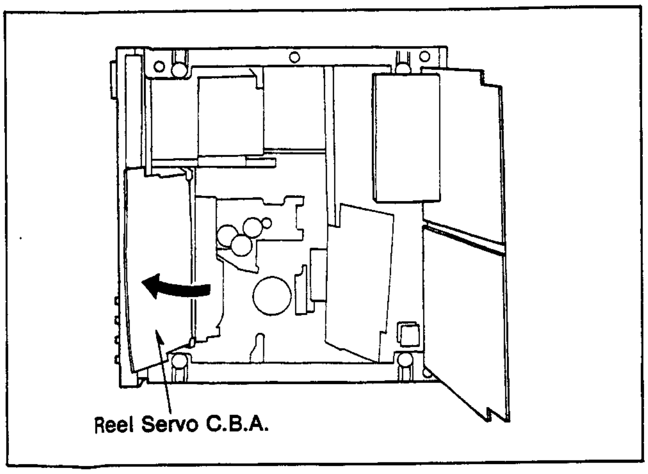

Reel Servo C.B.A.

Figure D22

2–14. Removal of the Cassette Compartment Unit

1. Unscrew the 2 screws (R) as shown in Figure D23.
2. Unscrew the 2 screws (S) as shown in Figure D23.
3. Disconnect a wire from P1508 on right side of the Cassette Compartment.
4. Remove the Top Plate.

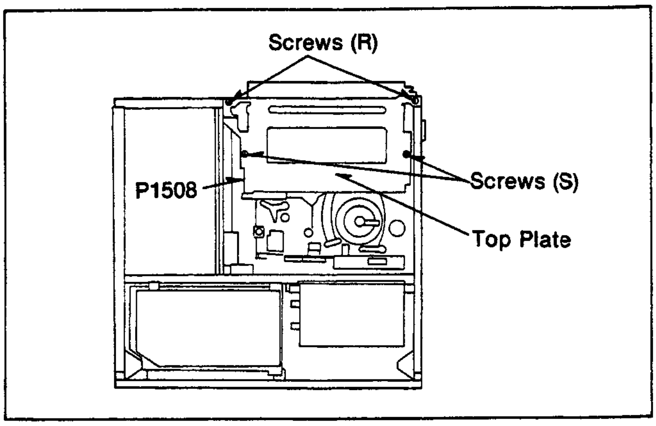

Screws (R)
P1508
Screws (S)
Top Plate

Figure D23

5. Remove a Cassette Holder Unit as shown in Figure D24.

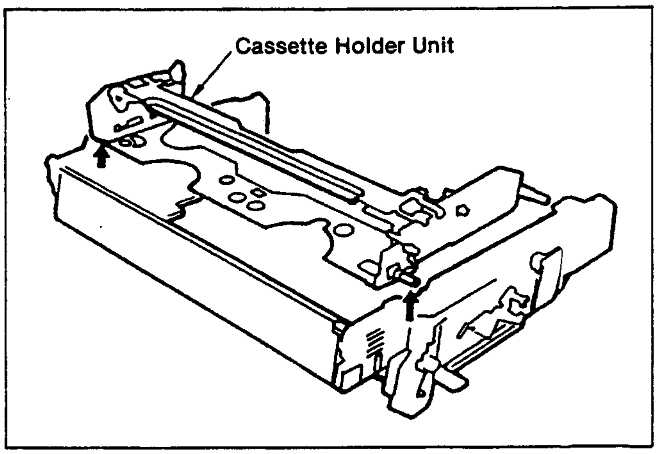

Cassette Holder Unit

Figure D24

6. Unscrew the 4 screws (T) and remove the Cassette Compartment as shown in Figure D25.

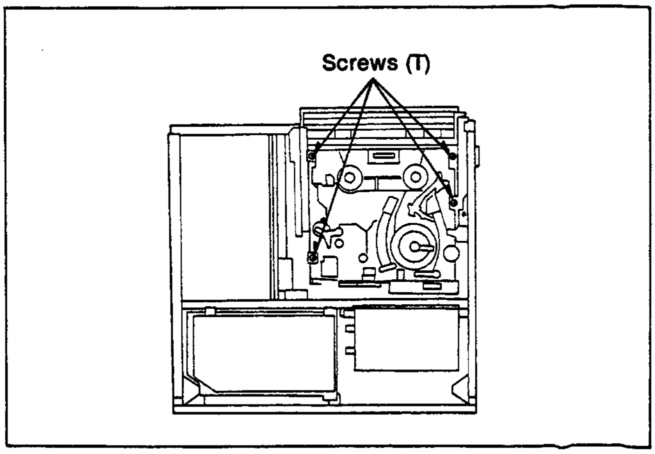


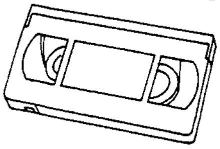
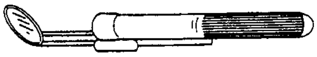
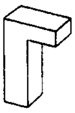
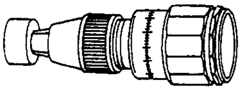
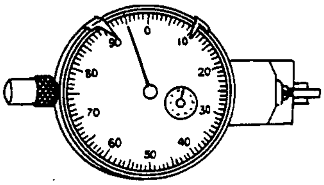
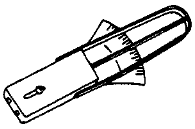
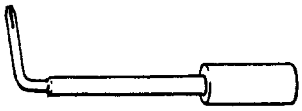
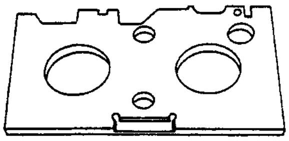
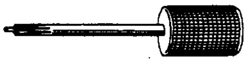
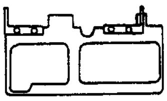
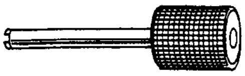
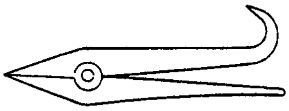
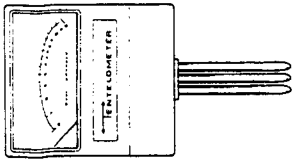
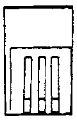
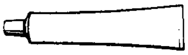
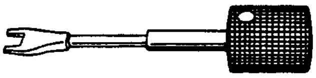
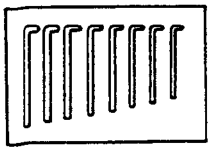
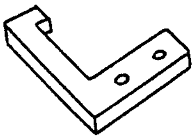
Figure D25

MECHANICAL ADJUSTMENT PROCEDURES

The regular maintenance is important to maintain the initial specification of the deck and to prevent tape damage.
The specified servicing fixture must be used to conduct adjustment.
The following fixtures, tools and measuring equipments are required to conduct complete Mechanical Adjustments.

CAUTION
When use the Tension Post Adj. Plate (VFK0236), pay attention to S-VHS detect switch on surface of mechanical chassis.

1. SERVICING FIXTURES & TOOLS

VFM8180HMDH VHS Alignment Tape (PAL) VFM8080HQFP VHS Alignment Tape (NTSC) 	VFK0343 Check Light 	VFK0344 Post Height Adjustment Fixture (P_1)  VFK0344
VFK0133 Dial Torque Gauge VFK0180 Plastic Clamper Only VFK0134 Adaptor for VFK0133 	VFK0190 Reel Table Height Gauge 	VFK66 Fan Type Tension Gauge 
VFK0269 L Type Screwdriver 	VFK0191 Post Adjustment Plate 	VFK0330 Fine Adjustment Screwdriver (3mmφ) 
VFK0236 Tension Post Adj. Plate 	VFK0329 Post Adjustment Screwdriver 	VFK0335 Retaining Ring Remover (3mm/4mm) 
VFK0132 Back Tension Meter (Tentelometer, Made in U.S.A.) 	VFK27 Head Cleaning Stick  MOR265 Morlytone Grease (Cam Gear, Slide Selection, Hyper Pressure Section etc.) 	VFK0328 H-Position Adj. Fixture 
VFK0326 Hex. Wrench Set (0.7, 0.9, 1.2, 1.5, 1.6, 2, 2.4, 3mm) 	Cleaning Liquid (Freon TF., Alcohol) < Purchase Locally > (Tape Transport Rubber Parts etc.) High Quality Machine Oil < Purchase Locally > (Reel Shaft, Capstan Shaft etc.)	VFK0578 Tension Sensor Adj. Fixture 

2. CYLINDER MAINTENANCE PROCEDURES

2-1. PROCEDURES FOR CLEANING OF THE CYLINDER UNIT

1. Position the video head to permit access for cleaning and hold the upper cylinder to keep it from turning while cleaning.
2. Gently rub the video head in direction of tape travel with Head Cleaning Stick moistened with Freon TF.
3. Repeat for the other video heads. (Figure M1)

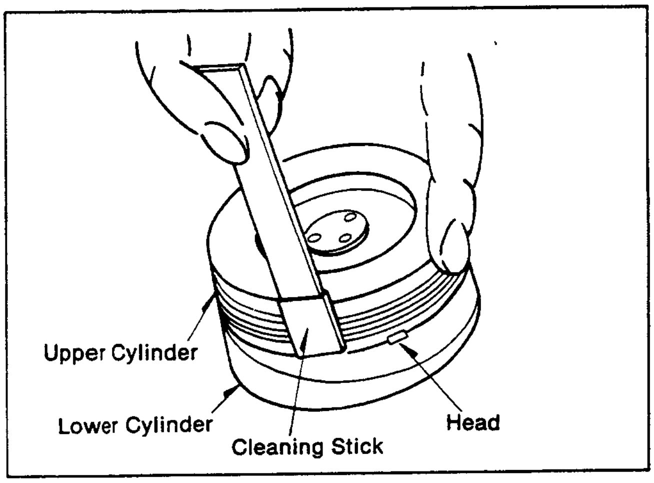


Figure M1

*Notes:
1. Do not rub vertically.
2. Do not apply any pressure to heads. If ontraminant is not easily removed, continued gentle wiping will usually remove the substance.
3. Do not rotate the Upper Cylinder Unit clockwise when cleaning it.

3. SERVICE INFORMATION

3-1. HOW TO EJECT MANUALLY

If the electrical circuit is defective and the action of unloading and front unloading don't work prorerly, it is possible to eject manually as follows.

1. Take out the Main AC.
2. Rotate the Wormshaft to clockwise until cassette is ejected as shown in Figure M2.

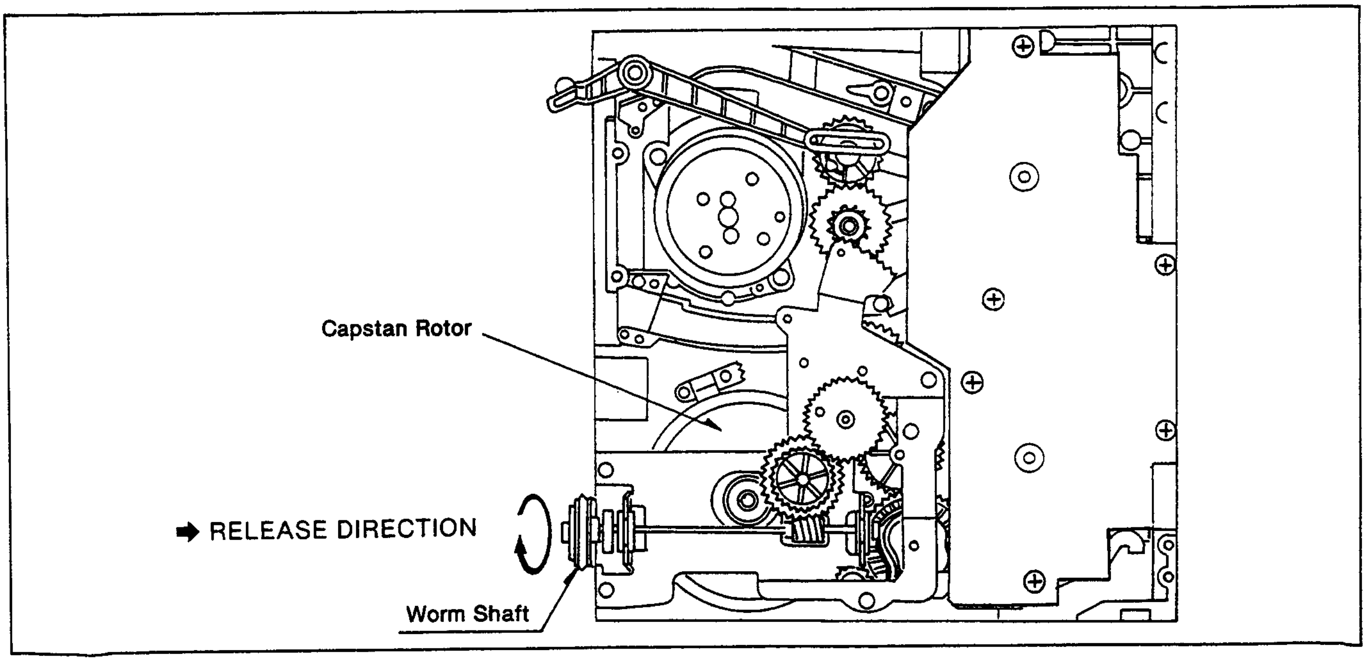


Figure M2

4. TAPE INTERCHANGEABILITY ADJUSTMENT PROCEDURES

4-1. ADJUSTMENT FLOWCHART

This flow chart describes the order of steps for adjusting the tape guide posts and A/C head in order to gain access to the items needing servicing. (Figures M3 and M4).

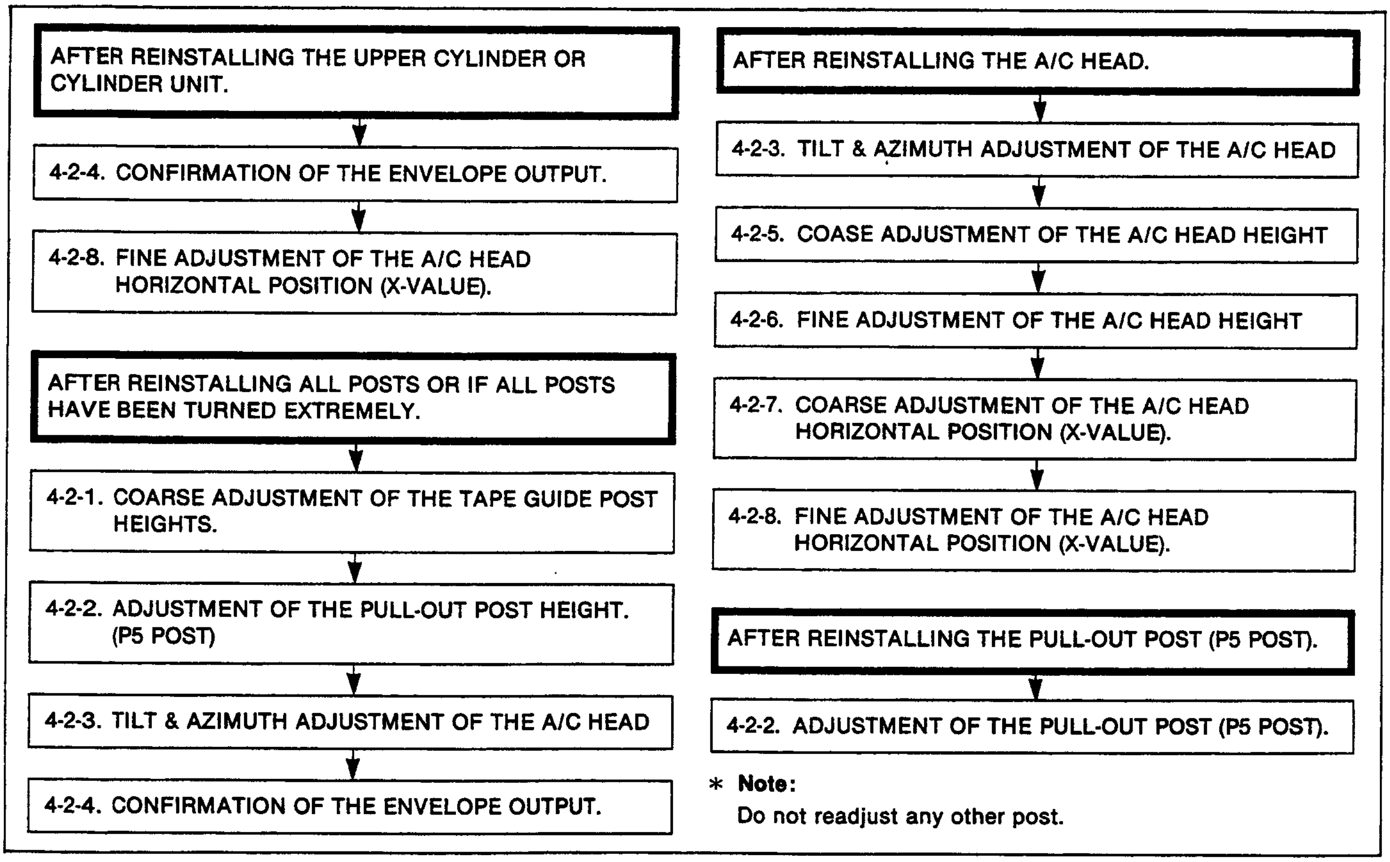

AFTER REINSTALLING THE UPPER CYLINDER OR CYLINDER UNIT.
4-2-4. CONFIRMATION OF THE ENVELOPE OUTPUT.
4-2-8. FINE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION (X-VALUE).
AFTER REINSTALLING ALL POSTS OR IF ALL POSTS HAVE BEEN TURNED EXTREMELY.
4-2-1. COARSE ADJUSTMENT OF THE TAPE GUIDE POST HEIGHTS.
4-2-2. ADJUSTMENT OF THE PULL-OUT POST HEIGHT. (P5 POST)
4-2-3. TILT & AZIMUTH ADJUSTMENT OF THE A/C HEAD
4-2-4. CONFIRMATION OF THE ENVELOPE OUTPUT.
AFTER REINSTALLING THE A/C HEAD.
4-2-3. TILT & AZIMUTH ADJUSTMENT OF THE A/C HEAD
4-2-5. COASE ADJUSTMENT OF THE A/C HEAD HEIGHT
4-2-6. FINE ADJUSTMENT OF THE A/C HEAD HEIGHT
4-2-7. COARSE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION (X-VALUE).
4-2-8. FINE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION (X-VALUE).
AFTER REINSTALLING THE PULL-OUT POST (P5 POST).
4-2-2. ADJUSTMENT OF THE PULL-OUT POST (P5 POST).
* Note:
Do not readjust any other post.

Figure M3

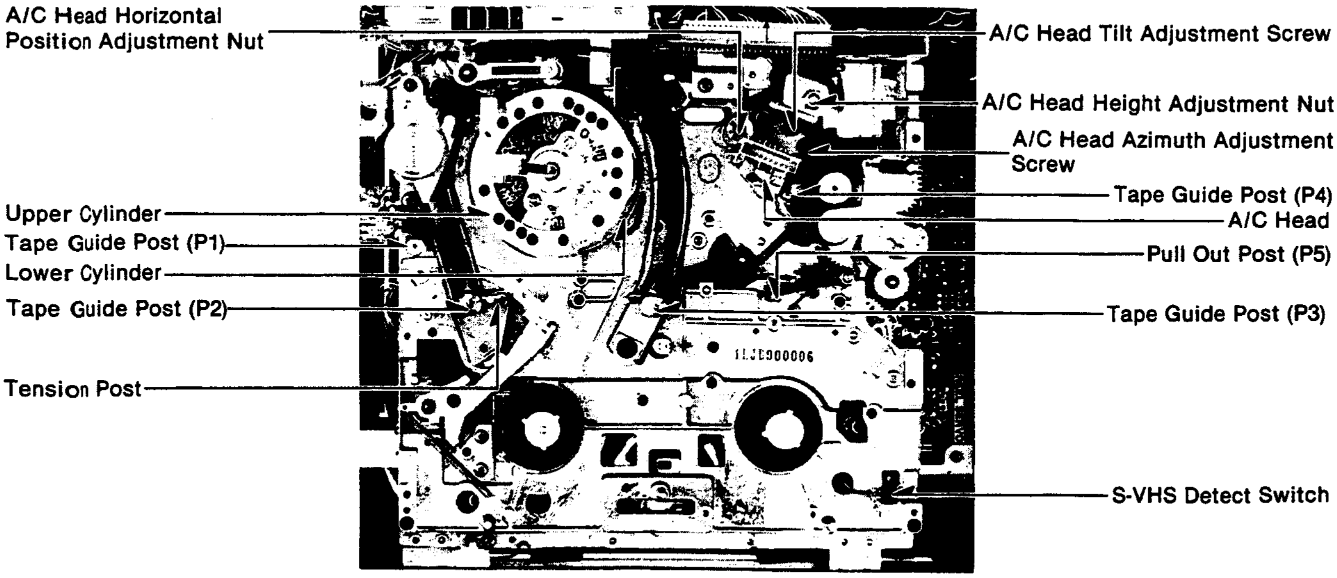

A/C Head Horizontal Position Adjustment Nut
Upper Cylinder
Tape Guide Post (P1)
Lower Cylinder
Tape Guide Post (P2)
Tension Post
A/C Head Tilt Adjustment Screw
A/C Head Height Adjustment Nut
A/C Head Azimuth Adjustment Screw
Tape Guide Post (P4)
A/C Head
Pull Out Post (P5)
Tape Guide Post (P3)
S-VHS Detect Switch

Figure M4

4-2. ADJUSTMENT PROCEDURES

4-2-1. COARSE ADJUSTMENT OF THE TAPE GUIDE POST HEIGHTS (P2 and P3)

*Notes:
1. The Tape Guide Posts have been precisely adjusted at the factory.
   Therefore, normally do not change the height of the P2 and P3 Posts.
   The following adjustment is required only when replacing the posts.
2. To prevent the alignment tape from being damaged, use a normal cassette tape for this procedure.

*Tools and Equipment Required:

Post Adjustment Plate	VFK0191
Reel Table Height Gauge	VFK0190
Post Adjustment Screwdriver	VFK0329
L Type Screwdriver	VFK0269

1. Remove the cassette compartment.
2. Place the Post Adjustment Plate over the reel tables. Confirm that the Post Adjustment Plate is firmly seated as shown in Figure M5.

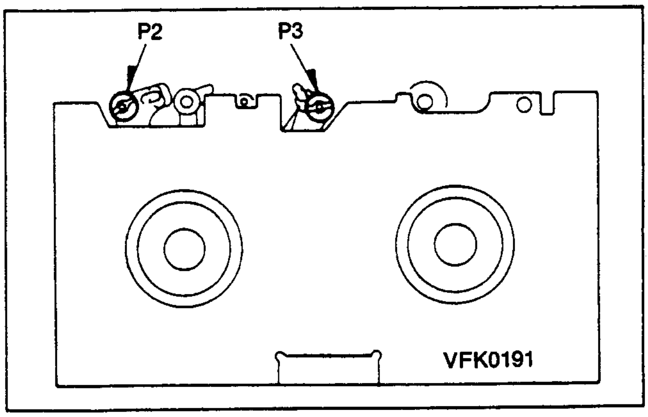


Figure M5

3. Lower 2 tape guide posts (P2 and P3) by turning the Post Adjustment screwdriver so that the condition of post becomes as shown in Figure M6. That is, the lower edge of Tape guide should be lower than surface of Adjustment Plate.

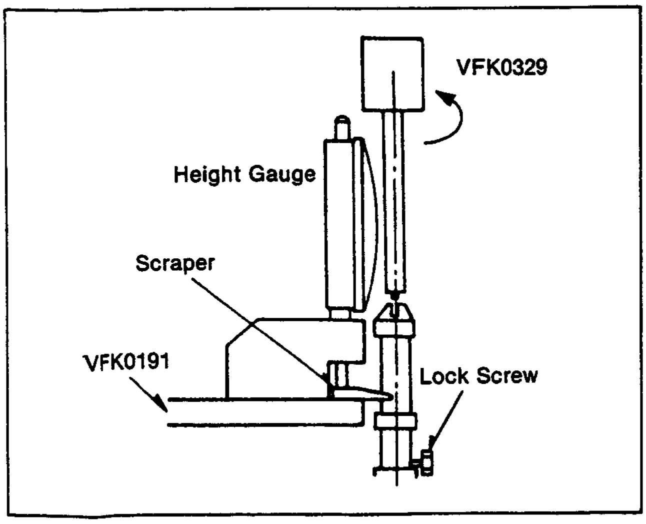


Figure M6

*Note:
Before turning P2 and P3 posts, slightly loosen the Lock Screw using the L Type Screwdriver.

4. Place the scraper of Reel Table Height Gauge as shown in Figure M7.
   Set the gauge to zero, then raise the post slowly until the lower tape guide just touches the bottom of the scraper. Use the gauge to determine the exact point at which the lower tape guide touches the scraper.

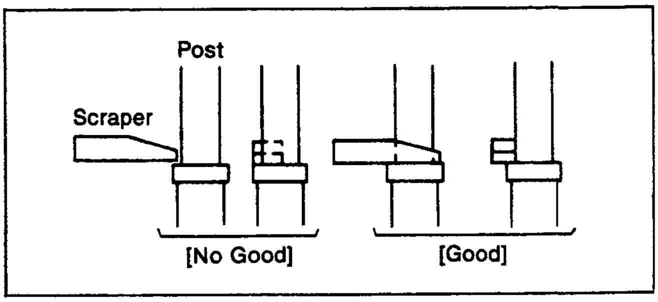


Figure M7

*Note:
After the adjustment, install the cassette compartment refering to " Reinstllation of cassette compartment".

4-2-2. ADJUSTMENT OF THE PULL-OUT POST HEIGHT

*Tools and Equipment Required:

Post Adjustment Plate	VFK0191
Reel Table Height Gauge	VFK0190
Nut Driver	(Purchase locally)

*Specification..................−1.2 +/− 0.01mm

*Note:
Unless the replacement or adjustment this post is required, the adjustment nut should not be turned.

1. Remove the cassette compartment.
2. Place the Post Adjustment Plate over the reel tables.
3. Turn the Capstan Motor counterclockwise (loading direction) until the mechanical condition becomes as shown in Figure M8.

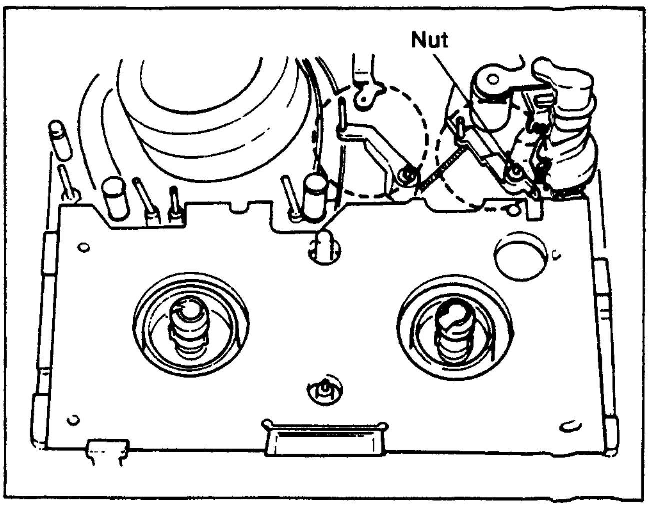


Figure M8

4. Place the Reel Table Height Gauge on the Post Adjustment Plate and set the gauge to zero "0" as shown in Figure M9.

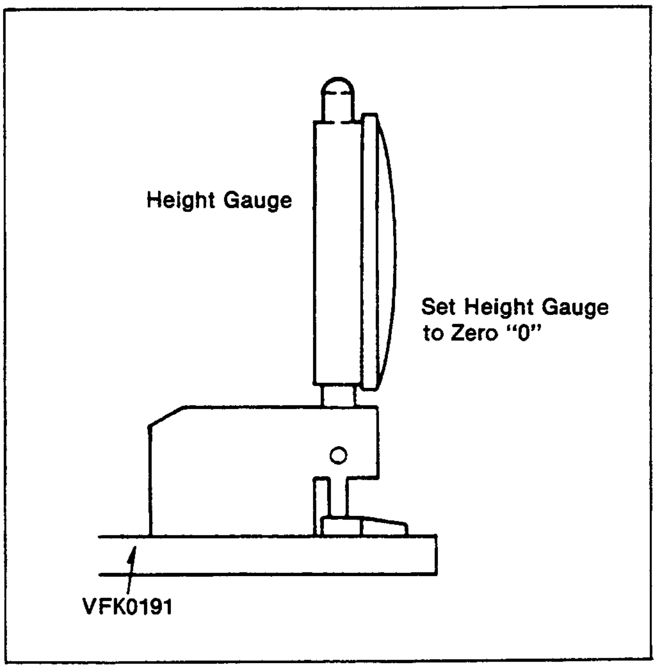

Height Gauge
Set Height Gauge to Zero "0"
VFK0191

Figure M9

5. Place the Reel Table Height Gauge as shown in Figure M9 and turn the nut slowly until the gauge reads −0.06 +/− 0.01mm.

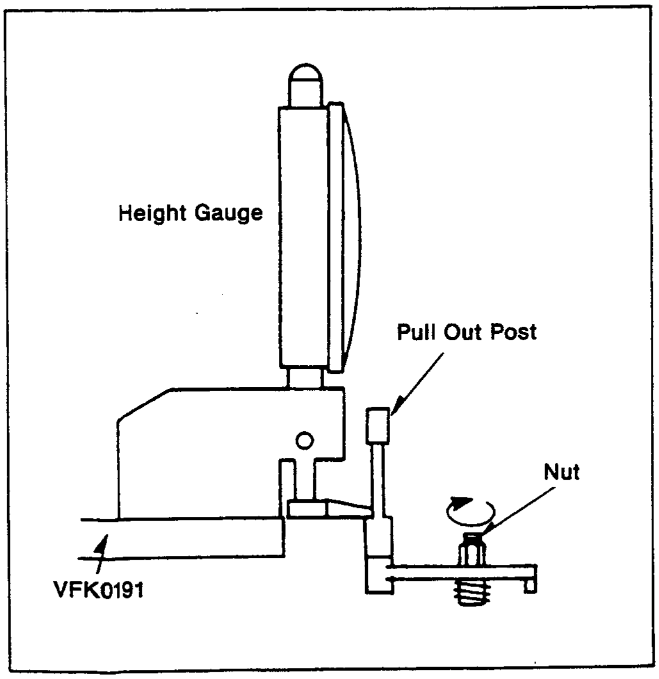

Height Gauge
Pull Out Post
Nut
VFK0191

Figure M10

6. After the adjustment, install the cassette compartment. (Refer to "Reinstallation of Cassette Compartment").
7. Play back a normal cassette tape on Fowerd Search mode and Review Search mode, and make sure that the edges of the tape are not curling at the bottom or top end of the posts P1, P2, P3, P4 and pull out post as shown in Figure M11 and M12.

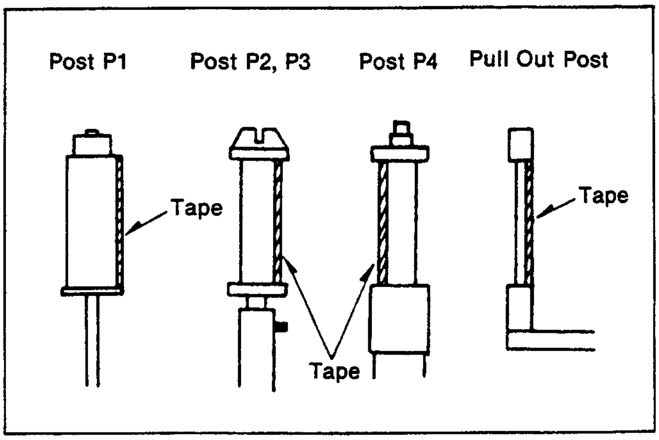

Post P1
Post P2, P3
Post P4
Pull Out Post
Tape
Tape
Tape

Figure M11

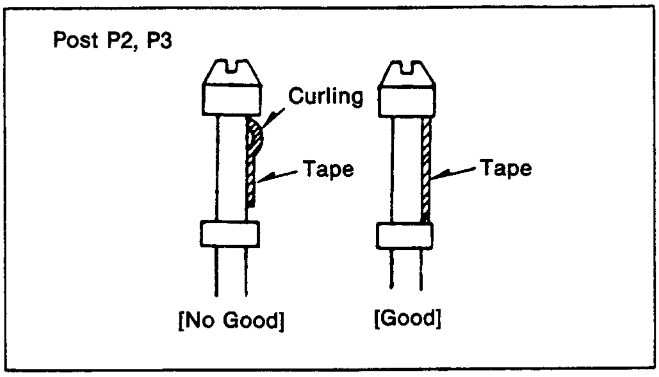

Post P2, P3
Curling
Tape
Tape
[No Good]
[Good]

Figure M12

8. If curling appears, readjusts each post (except P1, P4).

4–2–3. TILT & AZIMUTH ADJUSTMENT OF THE A/C HEAD

*Note:
This procedure should be performed only when the A/C Head is replaced and posts hight are readjusted.

*Equipment Required:
Alignment Tape VFM8180HMDH
Check Light..............................VFK0343

1. Connect the scope CH1 to the NOR/Hi–Fi Audio Output CH1 and the scope CH2 to the NOR/Hi–Fi Audio Output CH2 on the rear panel.
2. Play back the 2–nd portion (Normal Audio 6KHz) of the alignment tape (VFM8180HMDH).
3. Adjust the screw (J)(Figure M13) so that the CH2 output level becomes maximum as shown in Figure M14.
4. Adjust the screw (H)(Figure M13) so that the CH2 output level becomes maximum as shown in Figure M14.
5. Readjust the screw (H) so that the phases of the both channel are matched as shown in Figure M15.
6. Confirm that the tape runs around lower limiter of P4 post by using the Check Light.
7. If there is Waving or frilling in the lower edge (Figure M16), then repeat step 3 to 5.

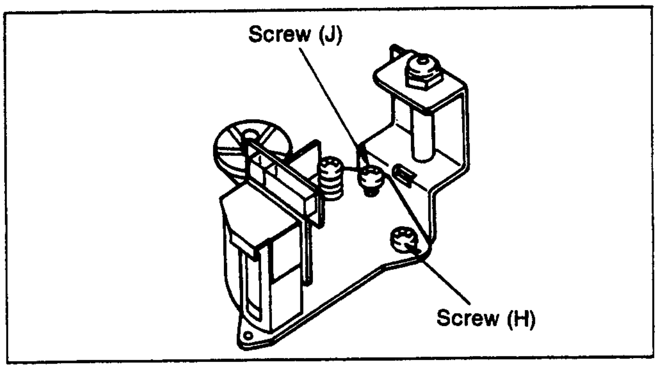


Figure M13

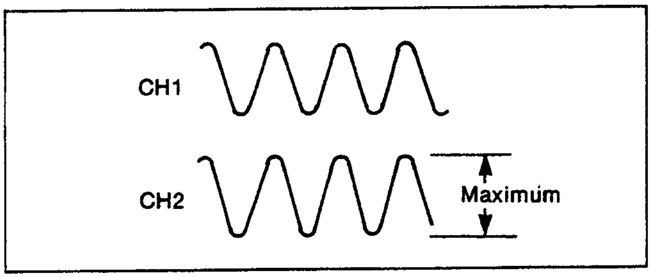


Figure M14

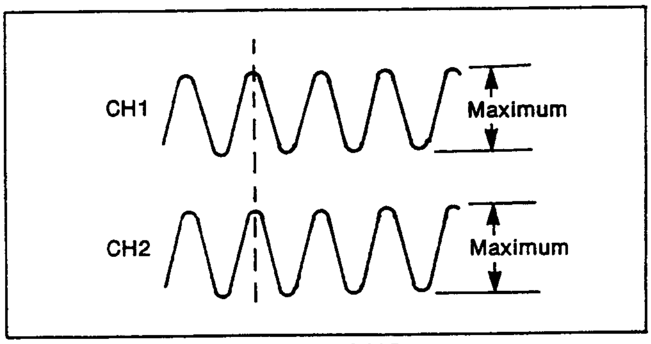


Figure M15

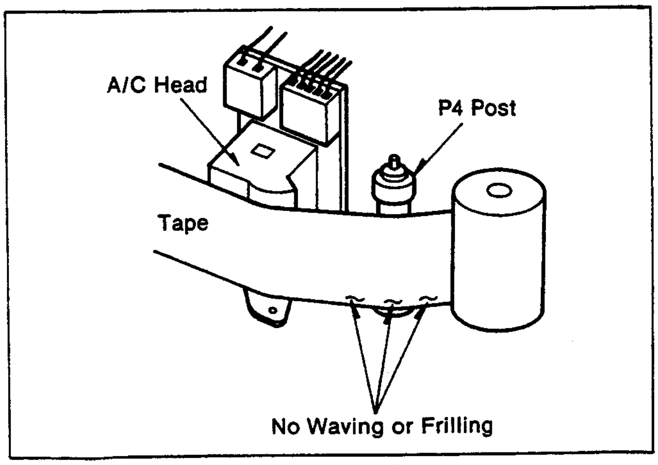


Figure M16

4-2-4. CONFIRMATION OF THE ENVELOPE OUTPUT

*Tools and Equipment Required:
Alignment Tape......................VFM8180HMDH
Post Adjustment Screwdriver..............VFK0329

*Note:
Before playing back the alignment tape, playback a normal cassette tape and confirm correct transport.

1. Connect the scope CH1 to TP5 on the Test Point C.B.A. and CH2 to TP6 to Ext-Trigger the scope.
2. Play back the 2-nd portion (Monoscope) of the alignment tape (VFM8180HMDH).
3. Turn the Tracking Control VR and adjust for maximum VIDEO FM envelope.
4. If the RF envelope appears like example "A" or "B" in Figure M17 then adjustment of the tape guide post (P2 : Entrance) is necessary.
5. Adjust the tape guide post (P2) with the post adjustment screwdriver so that the RF envelope waveform at the entrance portion becomes flat as shown in Figure M17–C.

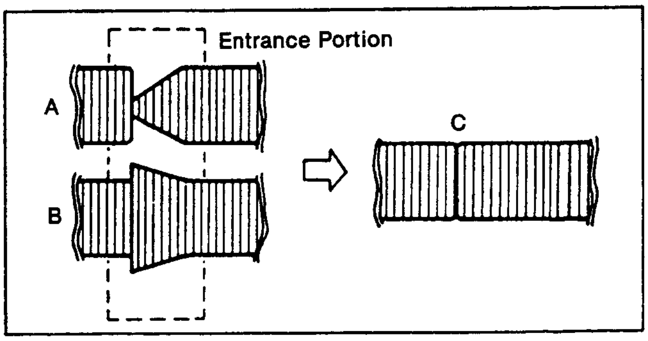


Figure M17

6. If the RF envelope appears like example "D" or "E" in Figure M18 , then adjustment of the tape guide post (P3 : Exit) is necessary.
7. Adjust the tape guide post (P3) in the same manner as the P2 post so that the exit portion becomes flat as shown in Figure M18–"F'.

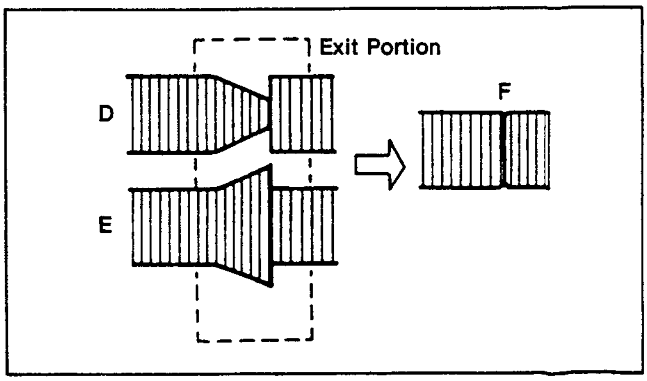


Figure M18

8. Turn the Tracking VR fully clockwise and counterclockwise. The output envelope should vary nearly parallel with other condition as shown in Figure M19.
9. Turn the Tracking VR into center fix position and adjust for maximum RF envelope.
If the RF envelope does not meet these specifications,

V1/VO >= 0.7
V2/VO >= 0.7
V3/VO >= 0.7

then repeat steps 4-9 again.

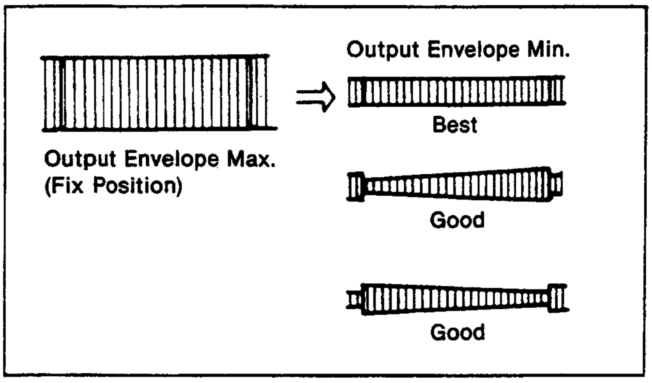


Figure M19

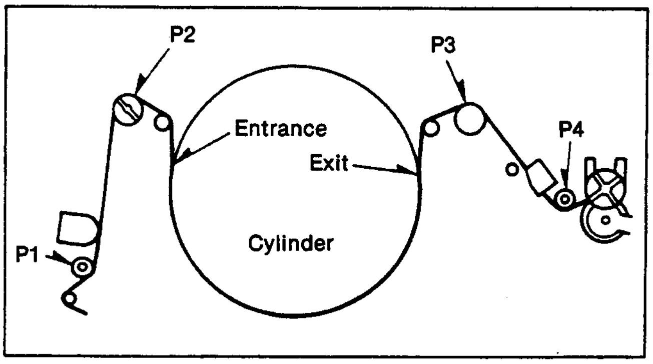


Figure M20 Loading of Posts

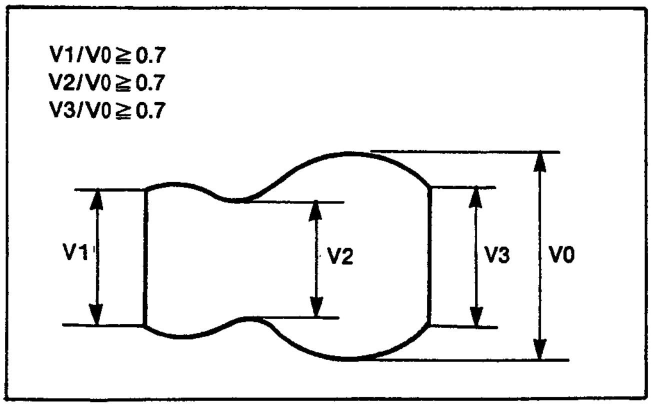


Figure M21 Spec. of Envelope Figure

4-2-5. COARSE ADJUSTMENT OF A/C HEAD HEIGHT

*Note:
This procedure should be performed only when the A/C Head is replaced.

*Tools and Equipment Required:
Check Light..............................VFK0343
Nut Driver....................(Purchase locally)

With the tape running, look at the lower edge of the control head by using the check light and check if the lower edge of tape runs along the lower edge of the control head.
If it doesn't slightly turn the nut (K) behind the A/C Head (Figure M22) to either lower or raise the A/C head so that the tape runs along the lower edge of the control head.
Turn the nut (K) clockwise to lower the head, and counter-clockwise to raise it.

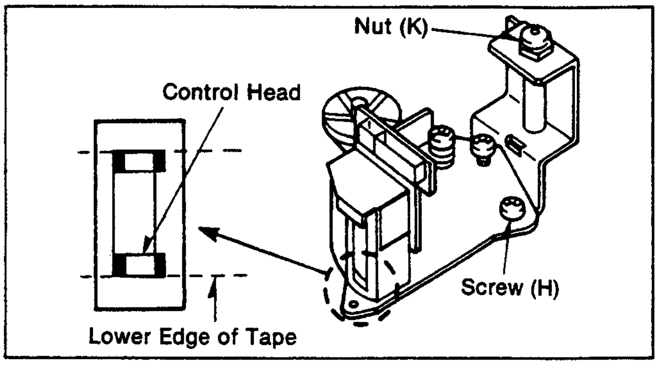


Figure M22

4-2-6. FINE ADJUSTMENT OF THE A/C HEAD HEIGHT

*Note:
When the A/C head is replaced, the coarse adjustment of the A/C head height is required before performing this fine adjustment.

*Tools and Equipment Required:
Alignment Tape.......................VFM8180HMDH
Nut Driver....................(Purchase locally)

1. Connect the oscilloscope to the NOR/Hi-Fi Audio output (CH2) on the rear panel.
2. Play back the 2-nd portion (Monoscope) of the alignment tape (VFM8180HMDH).
3. Adjust the nut (K)(Figure M22) so that the envelope becomes maximum.

4-2-7. COARSE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION

*Note:
This procedure should be performed only when the A/C head is replaced, and after performing the tape interchangeability adjustment.

*Tools and Equipment Required:
H-Position Adjustment Screwdriver........VFK0328
Alignment Tape.......................VFM8180HMDH

1. Set the Tracking Control VR to the center detent (fixed) position.
2. Connect the scope to TP5 on the Test Point C.B.A. and scope CH2 to the NOR/Hi-Fi Audio Output (CH1) on the rear panel.
3. Play back the 1st position (Monoscope and Normal Audio 3KHz) of the Alignment tape VFM8180HMDH.
4. Adjust A/C head horizontal position screw (Figure M23) so that the phase of audio drop out and video RF envelope drop-out becomes the same. (Figure M24)

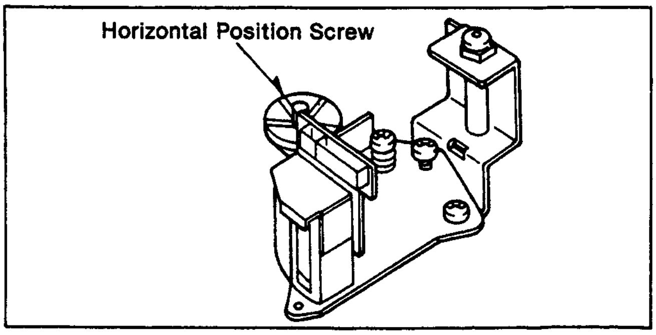


Figure M23

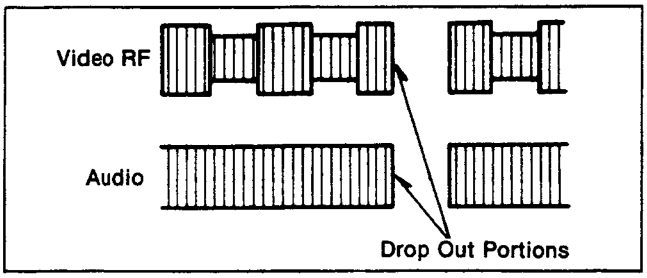


Figure M24 Horizontal Position Adjustment of A/C Head

*Note:
After completion the fine adjustment of the A/C head horizontal position, the phase of Audio drop–out and Video RF envelope drop–out may be changed slightly.

4–2–8. FINE ADJUSTMENT OF THE A/C HEAD HORIZONTAL POSITION (X–VALUE)

*Note:
This procedure should be performed only when the A/C head is replaced, and after performing the tape interchangeability adjustment.

*Tools and Equipment Required:
H–Position Adjustment Screwdriver........VFK0328
Alignment Tape......................VFM81080HMDH

1. Set the Tracking Control VR to the centre fix position.
2. Connect the oscilloscope to TP5 on the Test Point C.B.A.
3. Play back the 2–nd portion(Monoscope) of the alignment tape (VFM8180HMDH).
4. Adjust the Horizontal Position Screw of A/C head so that the RF signal becomes maximum level.

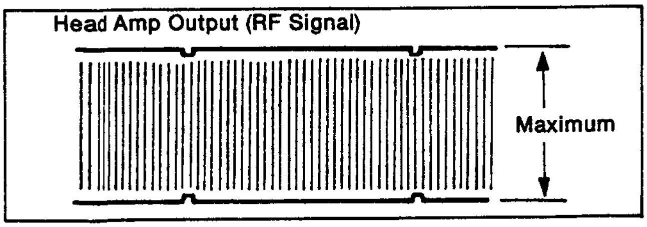


Figure M25

5. OTHER MECHANICAL ADJUSTMENT PROCEDURES

5-1. MEASUREMENT & ADJUSTMENT OF BACK TENSION

*Equipment Required:
Back Tension Meter......................VFK0132
VHS Cass. Tape (120 min. tape except S–VHS tape)

5–1–1. FWD TENSION ADJUSTMENT

*Specification.............................23∼27g

1. Play back the cassette tape from the beginning and wait until the tape movement get the stabilization. (for approx. 10∼20 seconds)
2. Pull the Inpedance Roller in the direction indicated by the arrow in Figure M26.
3. Insert the Back Tension Meter into the path of a tape, and measure the back tension.

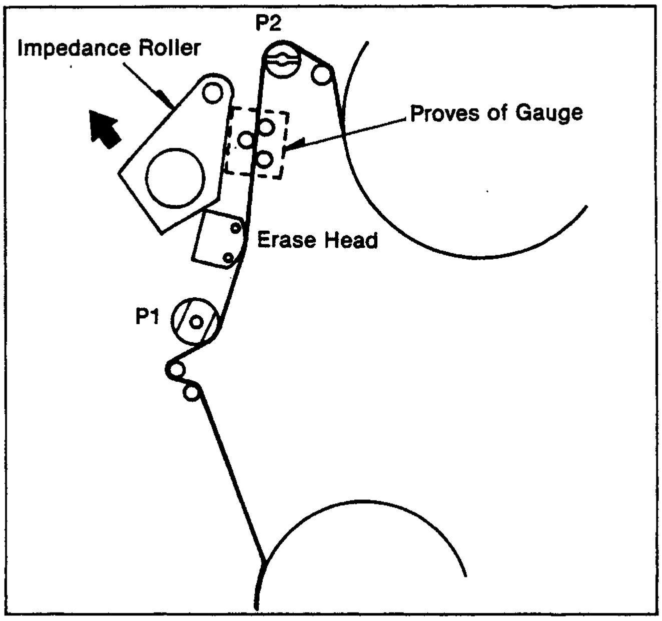


Figure M26 Measurement of Back Tension

4. If it is out of specification, replace the Tension spring.

5–1–2. REV TENSION ADJUSTMENT

Specification...............................30∼60g

1. Play back the cassette tape on the SP Reverse Play mode from the beginning and wait until the tape movement get the stabilization. (for approx 10∼20 secords)
2. Pull the Inpedance Roller in the direction indicated by the arrow in Figure M26.
3. Insert the Back Tension Meter into the path of a tape, and measure the back tension.
4. If it is out of specification, replace the Tension spring.

*Note:
1. While measuring, make sure that the three probes of the meter are all in good contact with the tape.
2. As the tension meter is very sensitive, we recommend taking 3 separate readings.

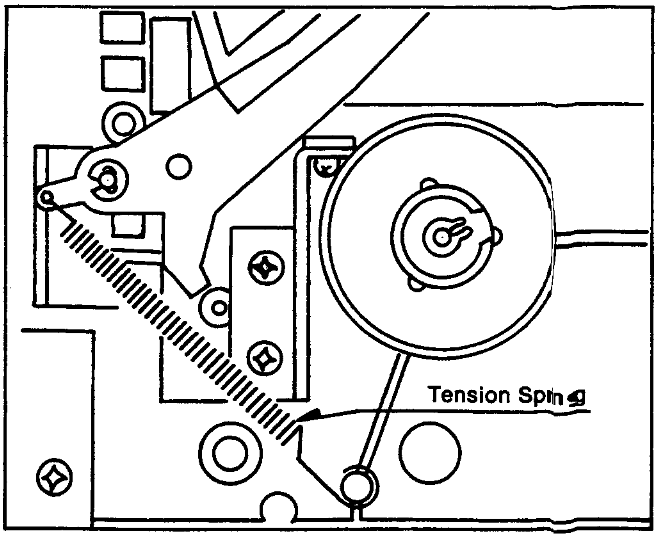


Figure M27

5-2. HEIGHT ADJUSTMENT OF THE REEL TABLES

*Equipment Required:
Post Adjustment Plate....................VFK0191
Reel Table Height Gauge..................VFK0190
*Specification...........................0 −0.15mm

1. Remove the top plate of cassette compartment and the Cassette Holder Unit.(refer to Disassembly Procedures)
2. Place the Post Adjustment Plate on the reel tables.
3. Place the Reel Table Height Gauge on the plate so that the scraper of the gauge touches the cut-out portion of the plate, then set the gauge to zero "0" as shown in Figure M28.

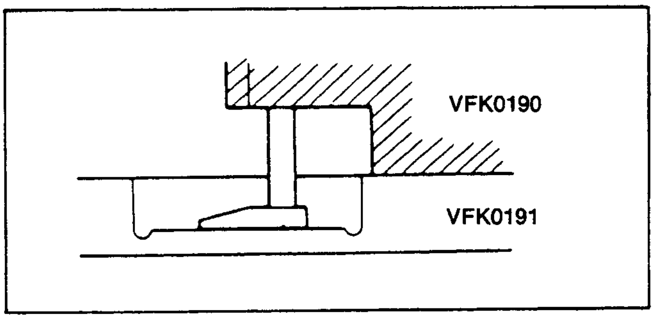


Figure M28

4. Measure the height of the top surface of either Reel Table and note the difference in height from the plate cut-out. (Figure M28 and M29) Repeat this procedures for the other Reel Table.

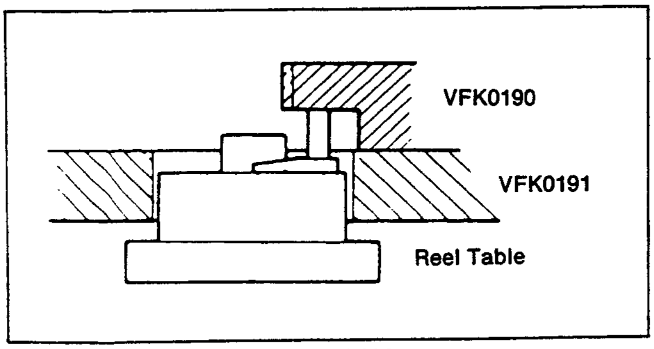


Figure M29

5. If the difference of Supply Reel table is more than 0.15mm higher or lower, replace the Supply Reel table. When the difference of Take Up Reel table is more than 0.15mm higher or lower, adjust nut (A) so that measurement becomes the spec. If you can not adjust to the spec, replace Takeup Reel table.

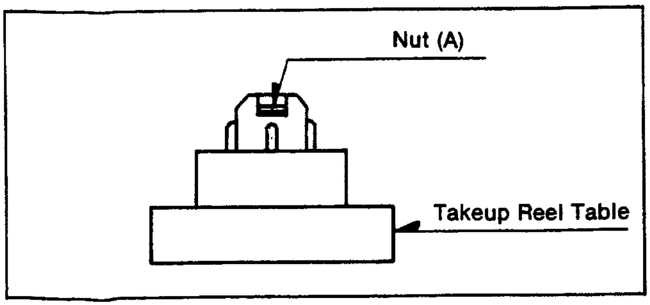


Figure M30

*Note:
When replacing the tables, the DD Reel Unit needs to be removed from the chassis. (Removal of the DD Reel Unit)
Remove 6 screws and carefully lift it out.

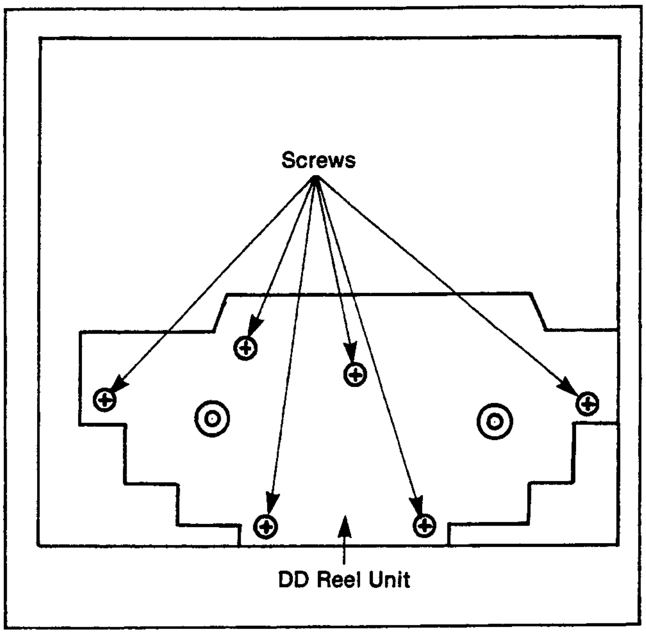


Figure M31 Bottom View of DD Reel Unit

5-3. ADJUSTMENT OF THE CAPSTAN THRUST GAP

*Equipment Required:
Reel Table Height Gauge..................VFK0190
Height Adjustment Fixture................VFK0344
*Specification.........................0.5 +0.05mm

1. Turn a Thrust Adjust Screw slightly until the capstan roter unit just touches the coil of the capstan stator unit.

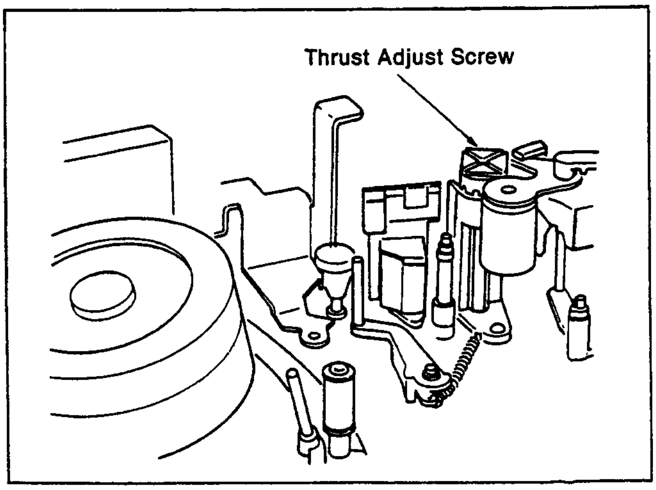


Figure M32

2. Set the Height Adjustment Fixture on the capstan Roter unit.
3. Place the height gauge on the bottom case unit and set the height gauge to zero "0".

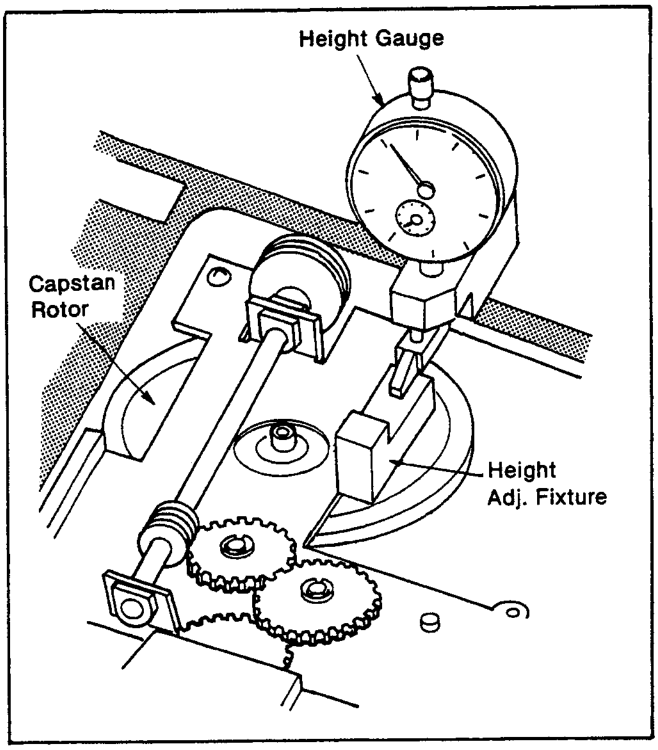

Height Gauge
Capstan Rotor
Height Adj. Fixture

Figure M33

4. Adjust a Thrust Adjust Screw so that the thrust gap becomes 0.5 +0.05mm.

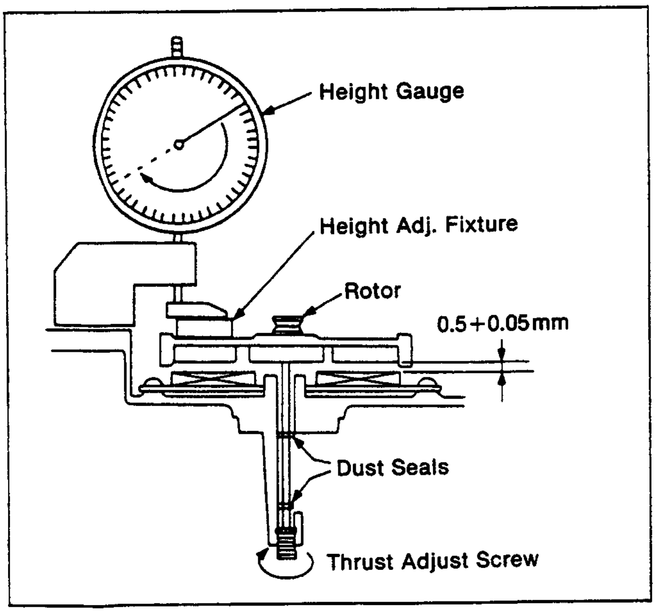

Height Gauge
Height Adj. Fixture
Rotor
0.5+0.05mm
Dust Seals
Thrust Adjust Screw

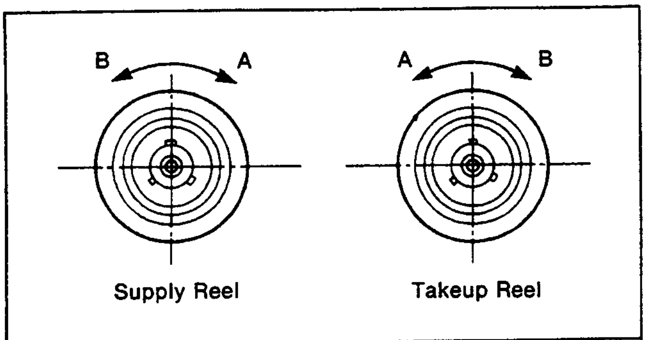
Figure M34

5-4. CONFIRMATION/ADJUSTMENT OF THE BRAKE TORQUE

5-4-1. CONFIRMATION PROCEDURE

*Equipment Required:
Torque Gauge............................VFK0133
Adaptor for Gauge.......................VFK0134

1. Remove the top plate of cassette compartment and the Cassette Holder Unit.(refer to Disassembly Procedures)
2. Attach the adaptor to the torque gauge and place the deck in STOP mode(Subloading mode).
3. Place the torque gauge on the reel table. The weight of the gauge should not rest on the reel table.
4. Turn the torque gauge in the direction indicated in Figure M35 until the brake begins slipping and read the gauge.


B
A
A
B
Supply Reel
Takeup Reel

	A	B
Takeup	550~1250g-cm	More Than 50g-cm
Supply		More Than 40g-cm

Figure M35 Brake Torque Spec.

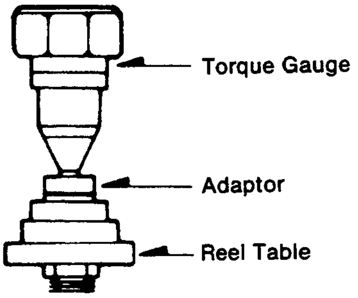

Torque Gauge
Adaptor
Reel Table

Figure M36 Measuring Method

5-4-2. ADJUSTMENT PROCEDURE

To adjust the brake torque, replace the Brake Spring.

*Note:
If the proper brake torque cannot be obtained by replacing the Brake Spring, clean the braking surface of the reel table with a soft cloth and remeasure the brake torque. If it is still out of specification, replace the Brake Arm Unit.

5-5. CONFIRMATION OF PRESSING FORCE OF PRESSURE ROLLER UNIT

*Equipment Required:
Fan Type Tension Gauge.................... VFK66
VHS 120 min. Tape (Except S-VHS Tape)
*Specifications......................1050 +/- 230g
T=more than 0.5mm

1. Play back the end portion of VHS tape.
2. Set Fan Type Tension Gauge to the part (A) of Pressure Roller Unit.
3. Press the Arm with the Gauge, in the direction indicated by the arrow as show in Figure M37.
4. Confirm the reading of the Tension Gauge is 1050 +/- 230g at the moment of the tape stop.
5. If it is out of spec, replace the Pirch Pressure Spring.
6. Place the deck in play (REV) mode.
7. Confirm the reading of the clearance (T) is more than 0.5mm. (Figure M38)
8. If it is out of spec, replace the Pressure Roller Unit.

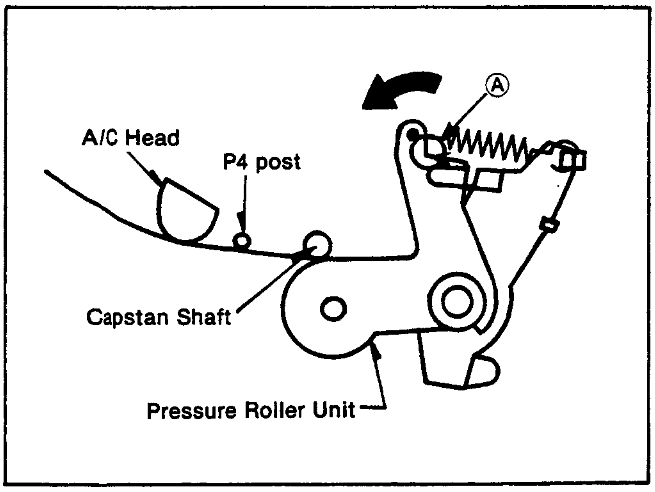


Figure M37

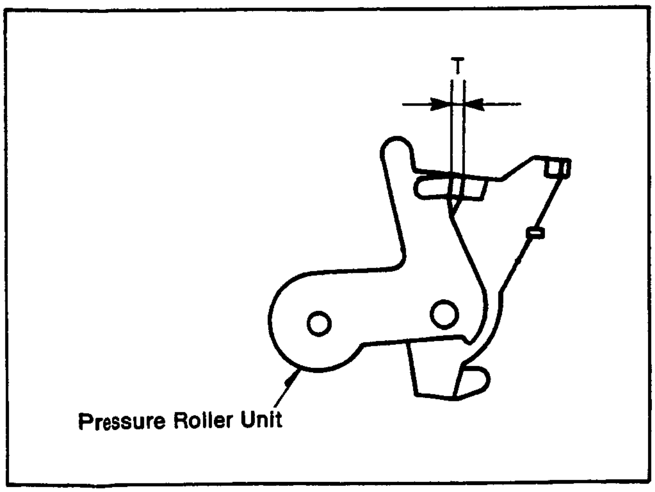


Figure M38

5-6. ADJUSTMENT OF REV TENSION SENSOR POSITION

*Equi pment Required :
Tension Sensor Adj Fixture............VFK0578
Tension Post Adj Plate................VFK0236
Fine Adj Screwdriver..................VFK0330
Digital Volt Meter.........(Purchase locally)

*Note:
Assemble a Tension Sensor Adjustment Fixture (VFK0578) and a Tension Post Adj Plate (VFK0236) as shown in Figure M39.

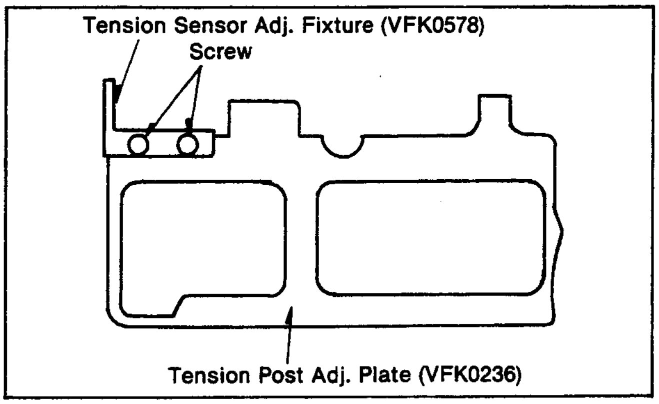

Tension Sensor Adj. Fixture (VFK0578)
Screw
Tension Post Adj. Plate (VFK0236)

Figure M39

1. Remove the Top Plate and Cassette Holder Unit.(refer to Disassembly Procedures)

*Note:
Do not disconnect 4Pin (exept 2P) flat wire from connector P1508 on the right side of Cassette Compartment.

2. Push the Sub Wiper Arm (R) to direction of Cassette loading.
Then the Sub Wiper Arm (R) goes down itself and mode of machine change to STOP.
3. Turn off the Power switch.
4. Remove the Cassette Compartment (refer to Disassembly Procedures) and disconnect 4Pin flat wire from P1508.
5. Connect a jumper wire between TP6001 and TP6003.
6. Connect the V.T.V.M. or D.V.M. to TP3 on the Test Point C.B.A.
7. Place the Tension Post Position Adjustment Plate with the Fixture over the reel tables as shown in Figure M40.

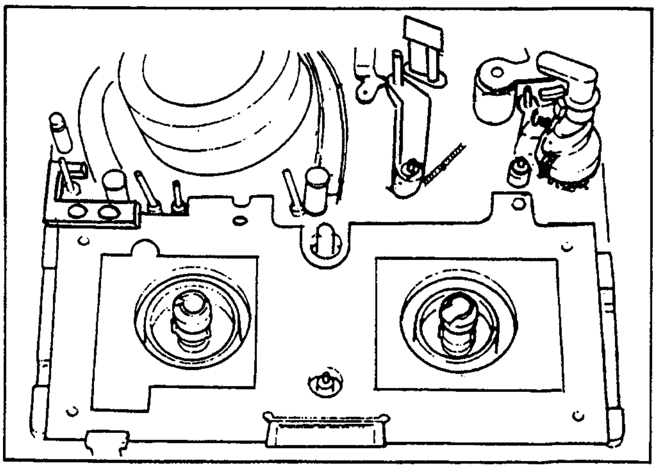


Figure M40

8. Turn on the Power switch and Place the unit in Rev mode using the Search Dial.
9. Slightly loosen 2 screws (C). Insert a Fine Adj Screwdriver in the hole (D). (Figure M41)

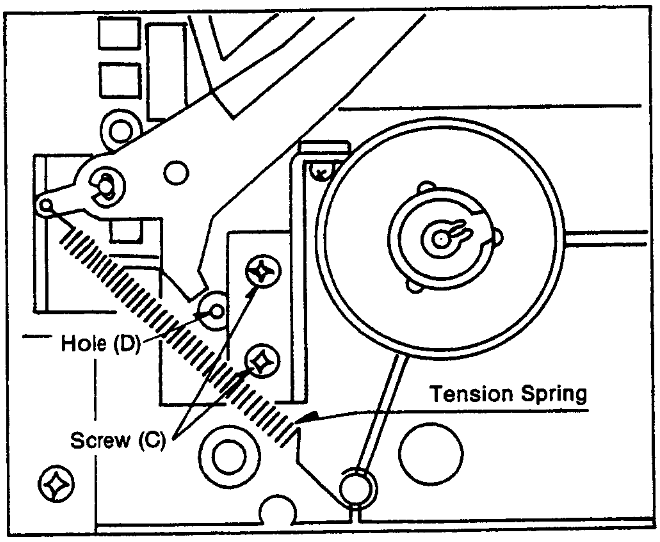


Figure M41

10. Adjust the Rev Sensor Position so that measurement becomes D.C. 2.0~2.5V on "Rev Playback" mode (2 Hour mode).
11. Remove the Tension Sensor Fixture.
12. Reinstall the Front Loading Unit.
13. Confirm Playback picture (Rev Playback mode, Playback mode e.t.c.)

5-7. ADJUSTMENT OF FG HEAD GAP

*Eqipment Required :
Fine Adjustment Screwdriver VFK0330
*Specification : 0.16 +/− 0.04mm

1. Slightly loosen the 2 screws.
2. Hold the F.G Head Unit with your fingers, and adjust the gap as specified.
3. After adjustment, tighten 2 screws as shown in Figure M42.

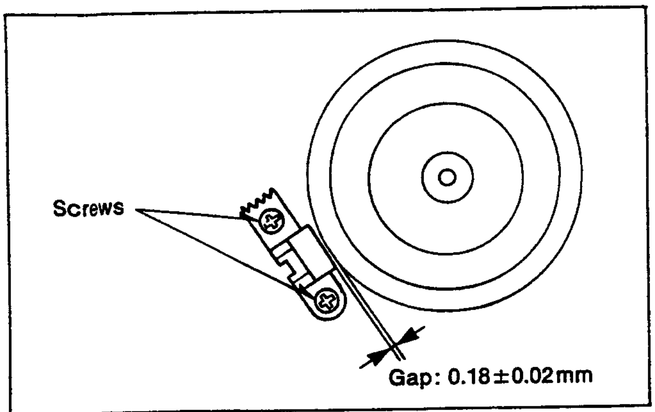


Figure M42 Adjustment of FG Head Gap

*Note:
Do not scratch the FG Head or outside surface of the rotor.

6. ASSEMBLY & ADJUSTMENT PROCEDURES OF MECHANISM

The mechanism of this model is mostly engaged to the System Control Circuit, through the mode select switch.
Therefore the relation between the mode select switch and the cam gear decides all further mechanical movement of the mechanical parts such as levers, gears, rollers and so on.
If these parts are not fixed properly, the unit will be unloaded or compulsorily stopped.
And it will result being damaged at any mechanical or electrical parts.
The overall mechanical condition (alignment) of bottom and top view are shown in Figure M43 and Figure M44. This mechanical adjustment is performed in following position (STOP mode).

6-1. CONFIRMATION OF ALIGNMENT CONDITION

1. Remove the Loading Belt. (Figure M45)
2. Remove the Gear Base Unit.
3. Ture the Center Gear to counter−clockwise until 2 big holes of Center Gear align with 2 big holes of Retainer Gear and Ring Gear and Chsssis as shown in Figure M44.
4. Identification hole on the Mode Select Switch at 6 o'clock position and aligned with small hole on Pinch Cam.
5. P5 Arm is completion loading position INCLIND BASE (S) and (T) are completion unloading position.
6. Small hole on Sub Cam Gear should align with small hole on the Connection Gear and rectangular mark on the Connection Gear should be at a 3 o'clock position.
7. Pressure Roller Unit is "UP" position.

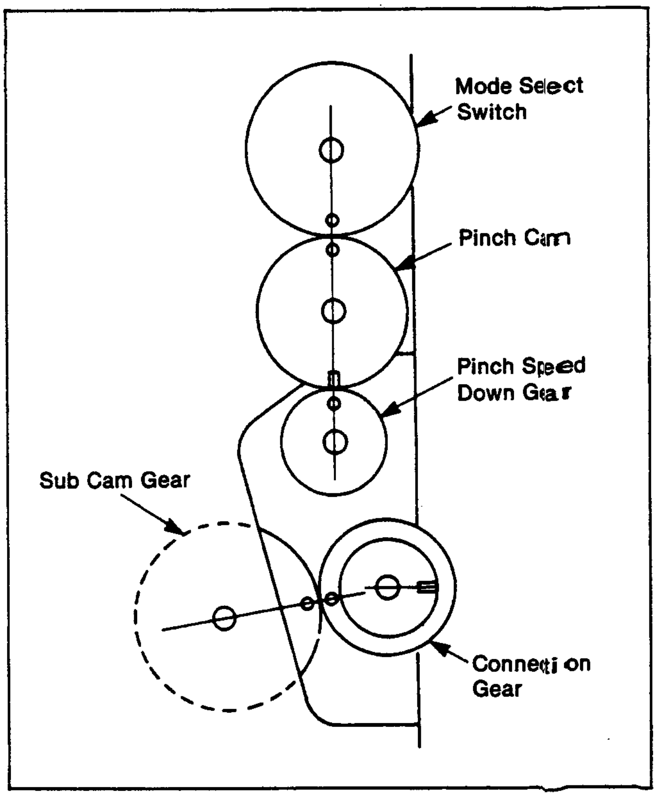


Figure M43 Bottom View of Overall IO–Mechanical Condition

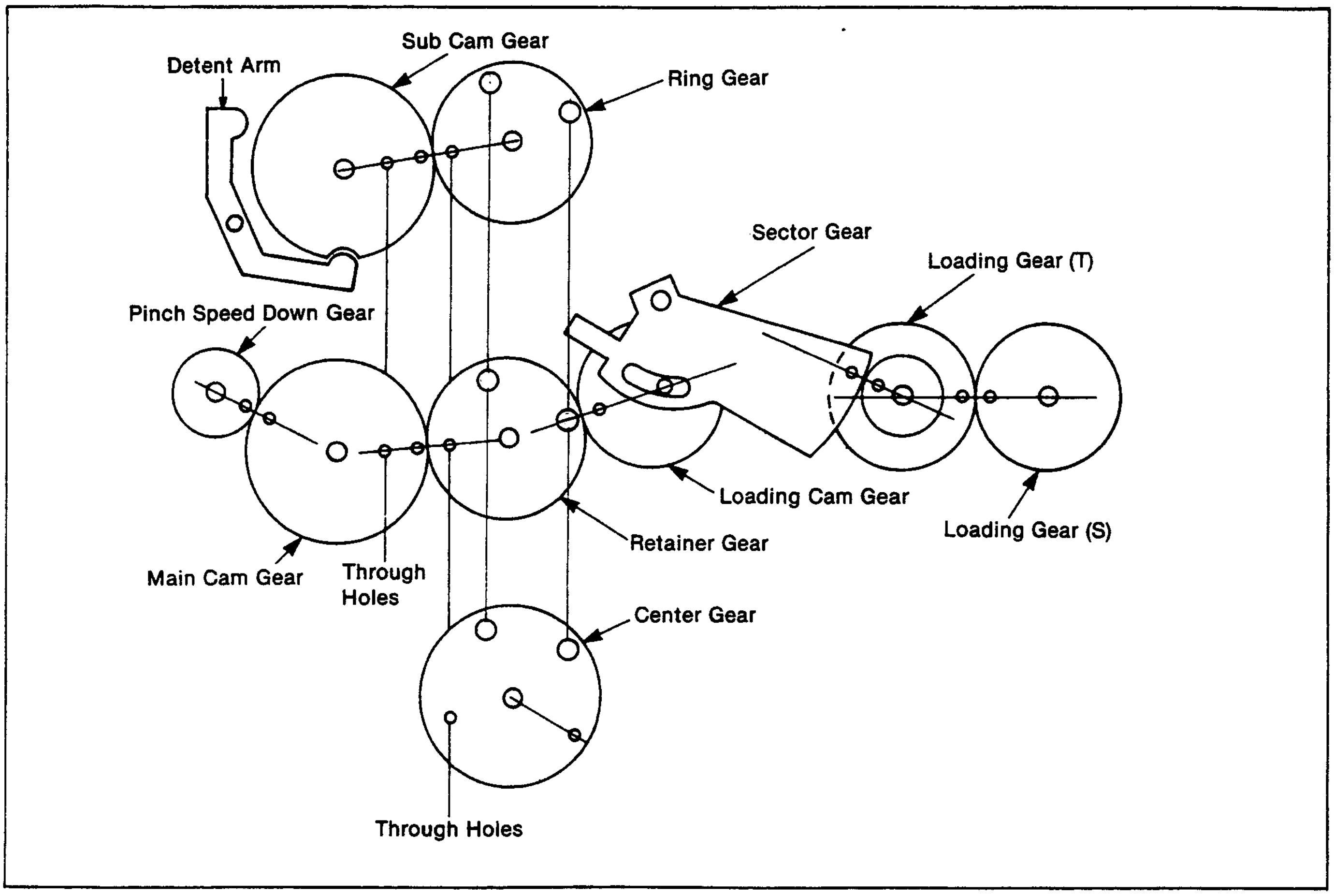

Detent Arm
Sub Cam Gear
Ring Gear
Sector Gear
Loading Gear (T)
Pinch Speed Down Gear
Loading Cam Gear
Loading Gear (S)
Retainer Gear
Main Cam Gear
Through Holes
Center Gear
Through Holes

Figure M44 Top View of Overall Mechanical Condition

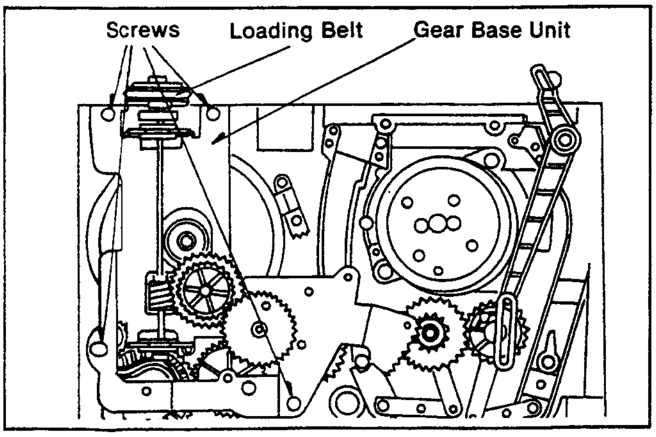

Screws
Loading Belt
Gear Base Unit

Figure M45

6-2. ASSEMBLY PROCEDURES OF SUB CAM GEAR, RING GEAR & DETENT ARM

1. Install the Ring Gear so that the two holes in the Ring Gear align with the two holes in the chassis as shown in Figure M46.
2. Install the Sub Cam Gear so that the large hole in Sub Cam Gear is aligned with the hole in chassis. Also the small hole (located just outside of large hole) on Sub Cam Gear should align with the hole on Ring Gear as shown in Figure M46.

*Note: It may be best to also align the Conection Gear (on top side) with Sub Cam Gear as shown in Figure M43.

3. Install the Detent Arm and make sure Detent Arm seats perfectly in detent of Sub Cam Gear as shown in Figure M46.

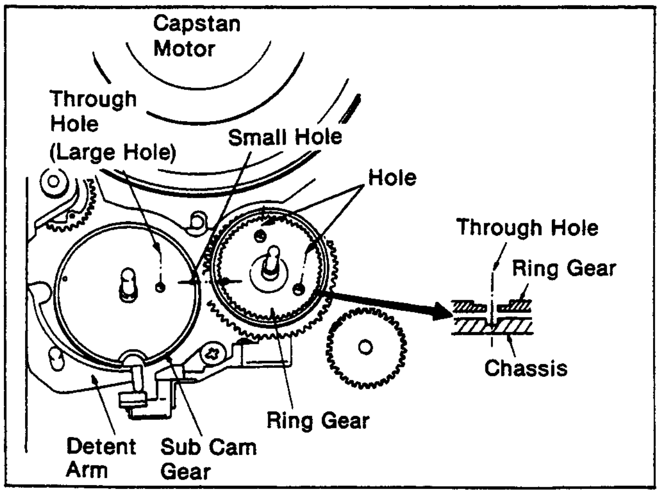

Capstan Motor
Through Hole (Large Hole)
Small Hole
Hole
Through Hole
Ring Gear
Chassis
Ring Gear
Detent Arm
Sub Cam Gear

Figure M46

6-3. ASSEMBLY PROCEDURES OF MAIN CAM GEAR & PINCH SPEED DOWN GEAR

1. Install the Min Cam Gear onto the Sub Cam Gear so that the large hole on the Main Cam Gear aligns with large hole on the Sub Cam Gear and chassis as shown in Figure M47.
2. Install the Pinch Speed Down Gear from top side of chassis so that the outer hole on the Main Cam Gear aligns with small hole on the Pinch Speed Down Gear as shown in Figure M47.

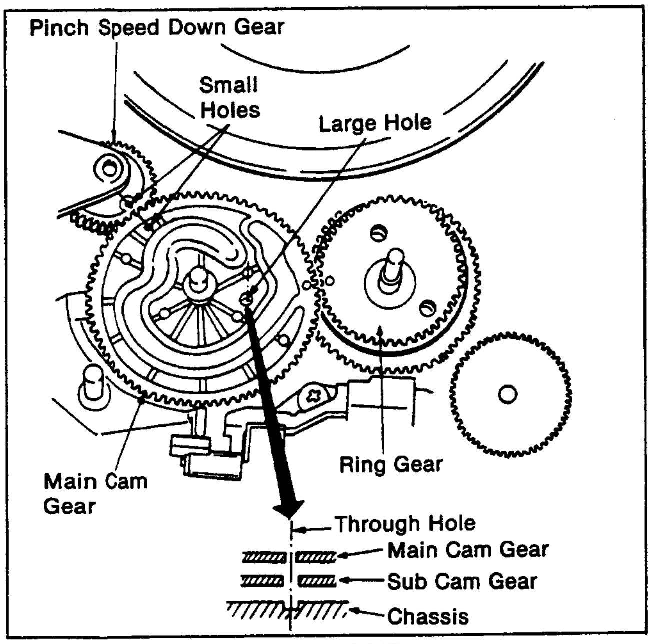

Pinch Speed Down Gear
Small Holes
Large Hole
Main Cam Gear
Ring Gear
Through Hole
Main Cam Gear
Sub Cam Gear
Chassis

Figure M47

6-4. ASSEMBLY PROCEDURES OF LOADING CAM GEAR & RETAINER GEAR

1. Install the Retainer Gear onto the Ring Gear so that the two holes in the Retainer Gear align with the two holes in the Ring Gear, at this time, small indent outside of large hole on the Main Cam Gear should align with small hole on the Retainer Gear as shown in Figure M48.
2. Push the Sub Loading Arm to the STOP position and keep it as shown in Figure M49.
3. Install the Loading Cam Gear so that the small hole which is directly outside of the large hole on the Loading Cam Gear is aligned with the outside hole of the Retainer Gear as shown in Figure M48.

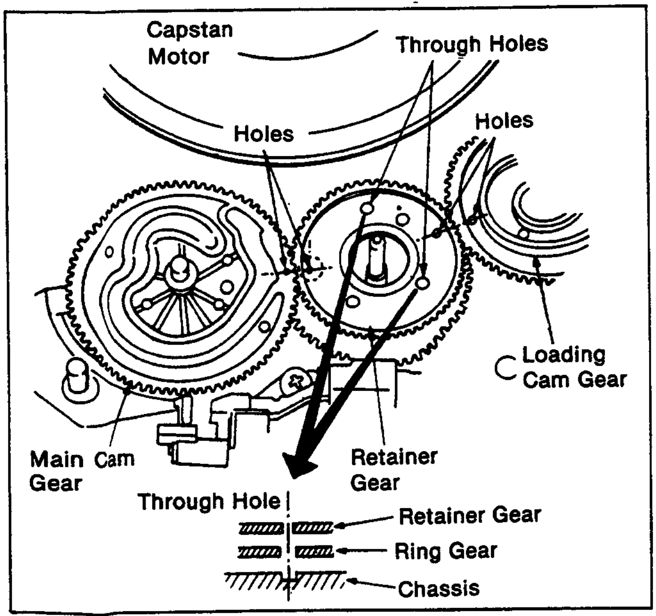

Capstan Motor
Through Holes
Holes
Holes
Loading Cam Gear
Main Cam Gear
Retainer Gear
Through Hole
Retainer Gear
Ring Gear
Chassis

Figure M48

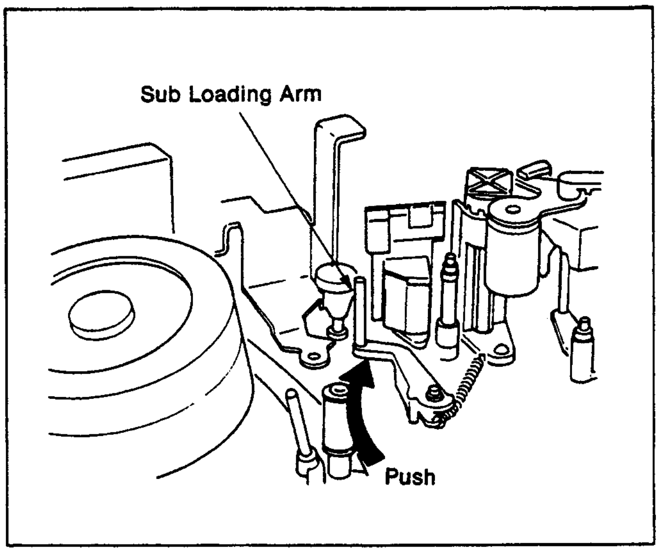

Sub Loading Arm
Push

Figure M49

6-5. ASSEMBLY PROCEDURES OF CENTER GEAR

1. Softly Install the Center Gear onto the Retainer Gear so that the two holes in the Center Gear align with the holes on the Retainer Gear, then install the cut washer as shown in Figure M44.

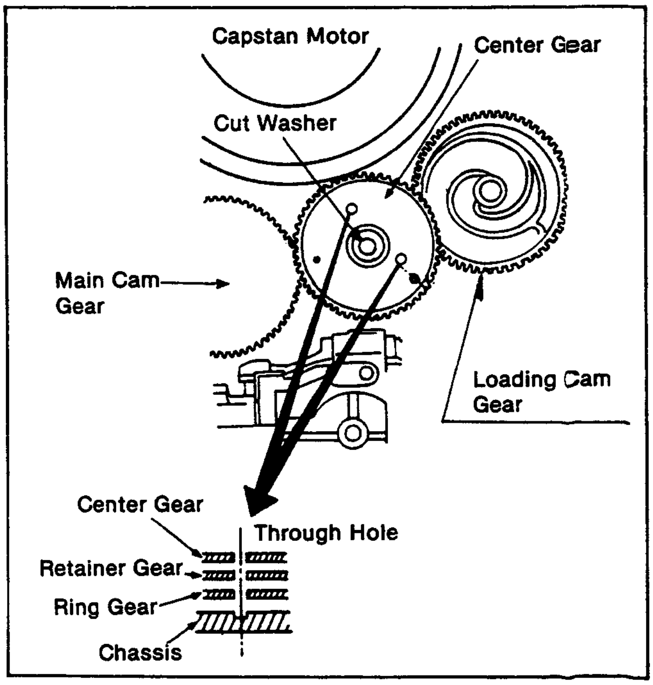

Capstan Motor
Center Gear
Cut Washer
Main Cam Gear
Loading Cam Gear
Center Gear
Through Hole
Retainer Gear
Ring Gear
Chassis

Figure M50

6-6. ASSEMBLY PROCEDURES OF MAIN LEVER & CAM FOLLOWER ARM UNIT

1. Install the Main Rod and then insert the cut washers as shown in Figure M51.

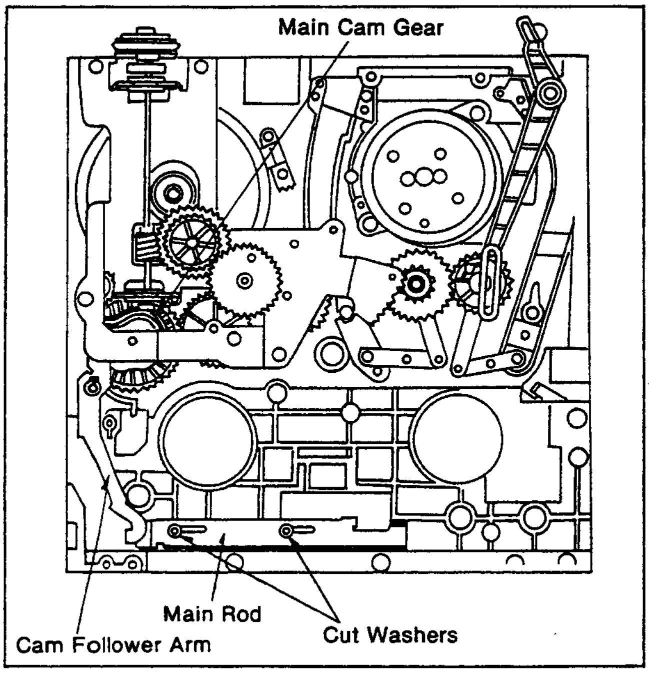


Figure M51

2. Install the Cam Follower Arm so that the pin of the Cam Follower Arm inserts into the groove of the Main Cam Gear and also inserts into the slot on the Main Rod , insert the retaining ring.

6-7. ASSEMBLY PROCEDURES OF LOADING GEAR (T), LOADING GEAR (S) & SECTOR GEAR

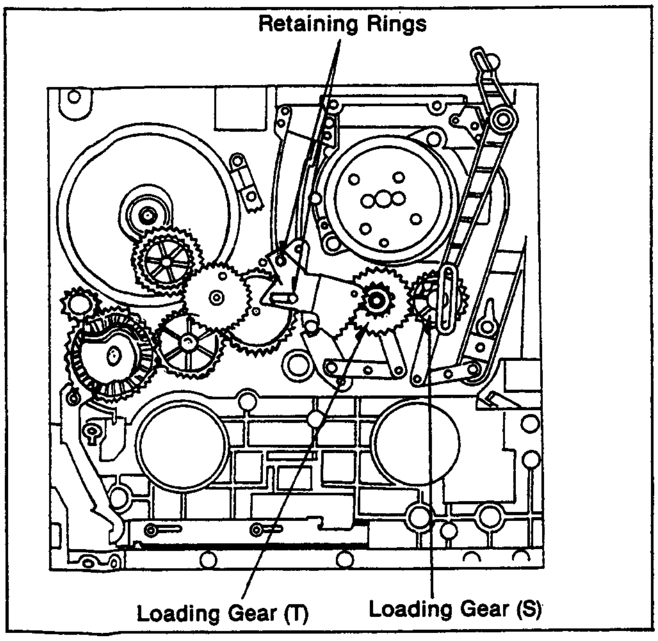


Figure M52

1. Set the P2 and P3 posts to fully unloaded position, then install the Loading Gear (T) and (S) so that the outer hole in the Loading Gear (T) aligns with the outer hole in the Loading Gear (S).(Figure M52)
2. Install the Sector Gear so that the outer hole in the Sector Gear aligns with the projection mark on Loading Gear (T). Then insert the retaining rings.(Figure M52)

6-8. ASSEMBLY PROCEDURES OF CONNECTION GEAR

*Note: Before assembling, Sub Cam Gear position (and positions of bottom side gears) must be correct as described before (Figure M43)

1. Install the Connection Gear so that the small hole on the Connection Gear aligns with the small hole on the Sub Cam Gear as shown in Figure M53.

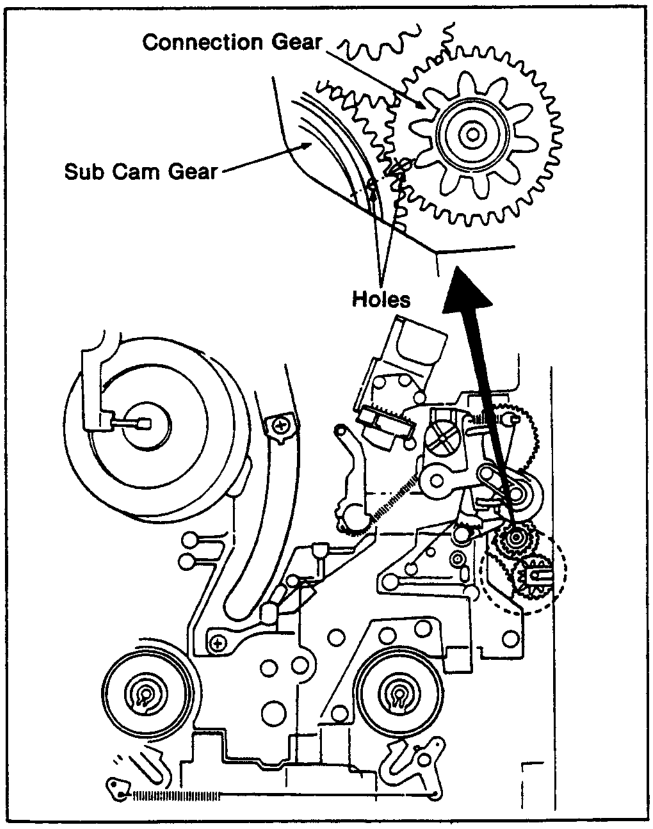


Figure M53

6-9. ASSEMBLY PROCEDURES OF MODE SELECT SWITCH & P5 PULL OUT SECTOR GEAR

1. Turn the Wormshaft to unloading position.
2. Install the Mode Select Switch and tighten the mounting screw, then solder the 5 soldering portions.
3. Install the P5 Pull Out Sector Gear so that the hole of P5 Pull Out Sector Gear aligns with the tip of gear at P5 Arm as shown in Figure M54.

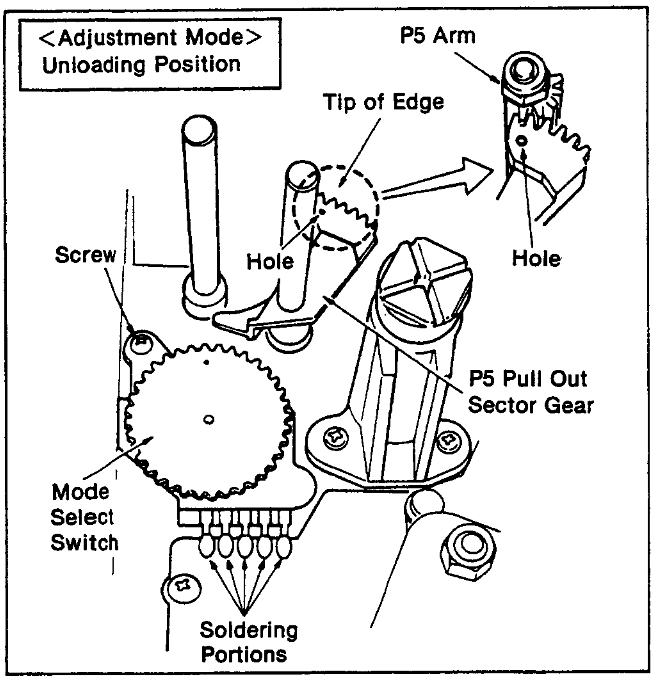

<Adjustment Mode>
Unloading Position
P5 Arm
Tip of Edge
Screw
Hole
Hole
P5 Pull Out
Sector Gear
Mode
Select
Switch
Soldering
Portions

Figure M54

6-10. ASSEMBLY PROCEDURES OF PINCH CAM & PRESSURE ROLLER UNIT

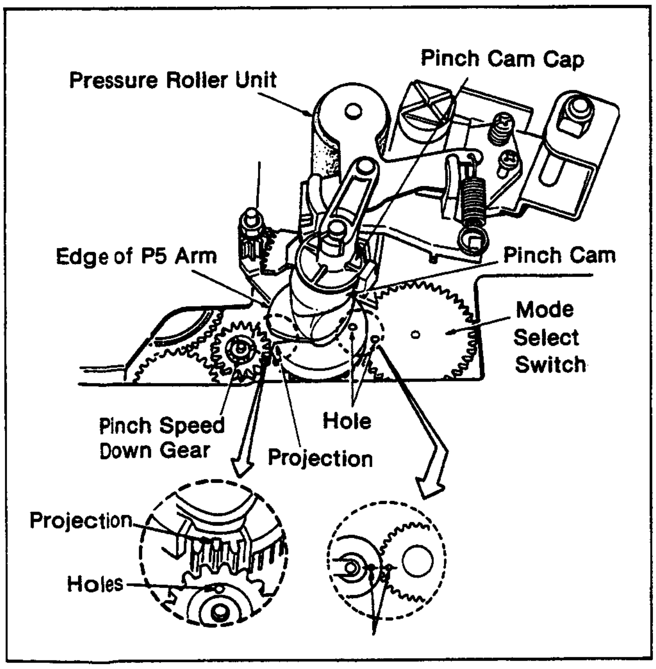

Pinch Cam Cap
Pressure Roller Unit
Edge of P5 Arm
Pinch Cam
Mode
Select
Switch
Pinch Speed
Down Gear
Hole
Projection
Projection
Holes

Figure M55

1. Install the Pinch Cam while pushing the P5 post forwad. The gear of the Pinch Cam should drop to a seated position. In this position make sure hole in the Mode Select Switch aligns with small hole on the Pinch Cam, also the small rift on the Pinch Cam should align with the hole on the Pinch Speed Down Gear as shown in Figure M55.
2. Install the Pressure Roller Unit. Make sure the seats perfectly onto the Pinch Cam, then install the Pinch Cam Cap.

6-11. REINSTALLATION OF CASSETTE COMPARTMENT

When you reinstall the cassette compartment, the position adjustment of mechanism is necessary for correct operation, as follows.

A. Comfirmation of STOP ALIGNMENT CONDITION

1. Remove the Loading Belt. (Figure M45)
2. Remove the Gear Base Unit.
3. Ture the Center Gear to counter-clockwise until 2 big holes of Center Gear align with 2 big holes of Retainer Gear and Ring Gear and Chsssis as shown in Figure M44.
4. Identification hole on the Mode Select Switch at 6 o'clock position and aligned with small hole on Pinch Cam.
5. P5 Arm is completion loading position INCLIND BASE (S) and (T) are completion unloading position.
6. Small hole on Sub Cam Gear should align with small hole on the Connection Gear and rectangular mark on the Connection Gear should be at a 3 o'clock position.
7. Pressure Roller Unit is "UP" position.

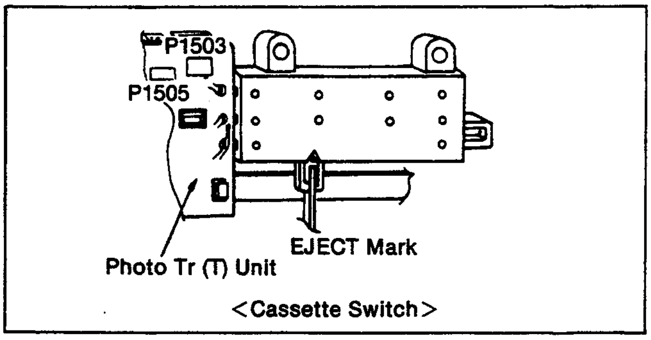

P1503
P1505
Photo Tr (T) Unit
EJECT Mark
<Cassette Switch>

Figure M56

B. Confirmation of Cassette Compartment

1. Confirm that the Cassette Compartment is aligned properly. In the EJECT position (Cassette Holder up and advanced to the front) the two V-shaped marks on the slide switch should align. The slide switch is located on the right side of the Cassette Assembly towards the rear as shown in Figure M56.
2. Remove the 2 screws (A) as shown in Figure M57.
3. Take the top plate out.
4. Take the cassette Holder unit out as shown in Figure M58.

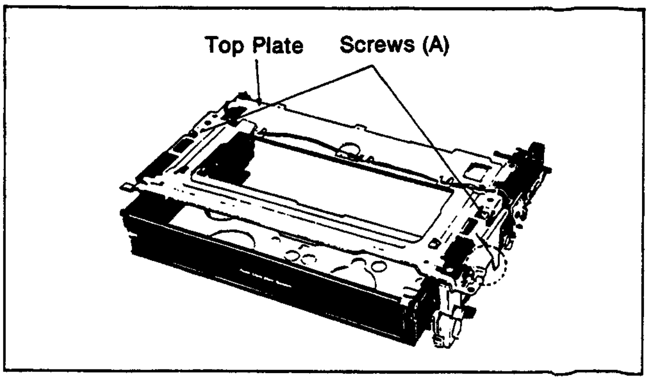

Top Plate
Screws (A)

Figure M57

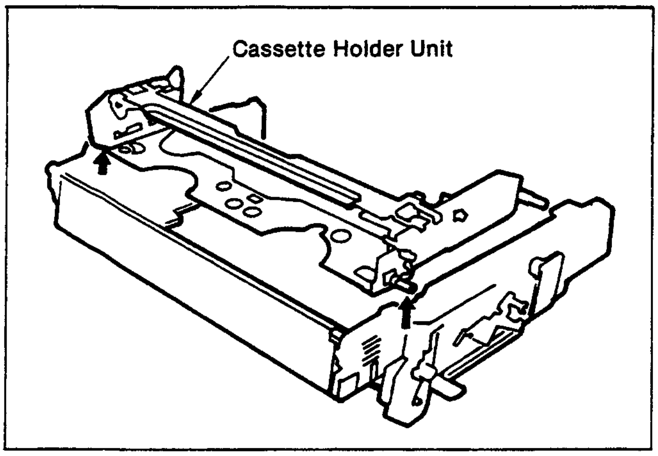

Cassette Holder Unit

Figure M58 Removal of cassette holder unit

5. Press the sub wiper arm (R) to direction indicated by arrow so that the sub wiper arm (R) comes to cassette down position (STOP) completely as shown in Figure M59 and keep it.
   In this position, the arrow on the Sub Wiper Arm (R) should align with the arrow on the Rack (A)(1) Unit as shown in Figure M60.

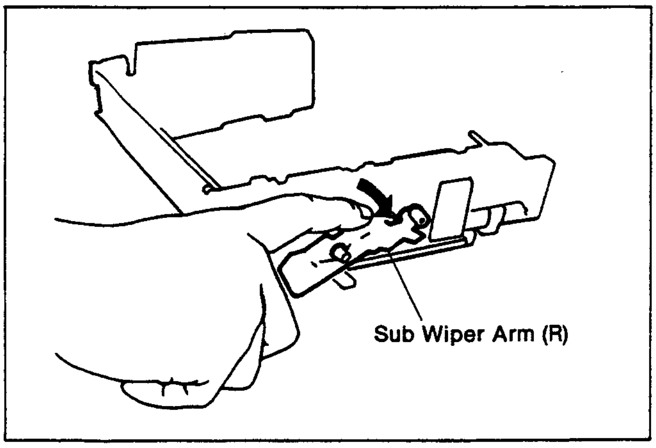

Sub Wiper Arm (R)

Figure M59

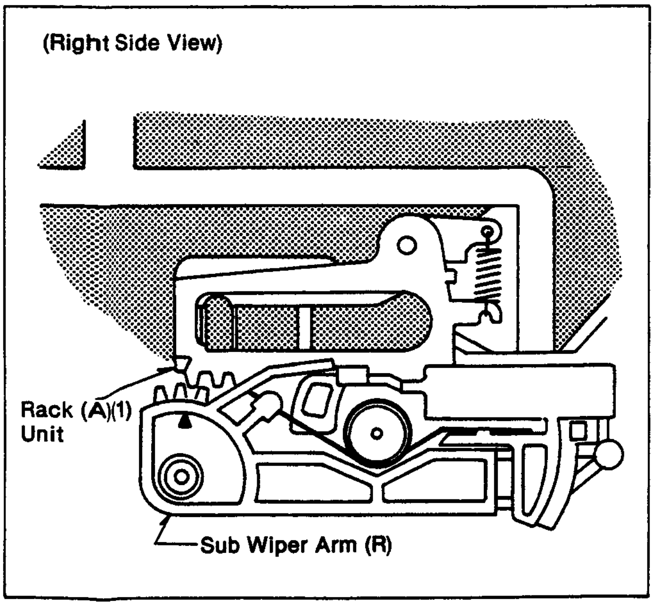

(Right Side View)
Rack (A)(1)
Unit
Sub Wiper Arm (R)

Figure M60

6. If the Cassette Compartment is not aligned, re-alignment may be accomplished by pushing the Main Shaft Unit to the right (gently) and pushing the front of the Rack Unit to the left. This procedure will disengage the theeth of the Rack Gear from the theeth on Sub Wiper Arm assembly. This will allow you to change the positional relationship between the Sub Wiper Arm Assembly and Rack Unit. This procedure is best attempted in the EJECT position. Once this is done, check for smooth operation of the compartment by inserting a cassette, and pushing in, and down.

C. Installation Procedure

1. Comfirm that the chassis is aligned properly for ALIGNMENT CONDITION as shown in Figure M37 and M38.
2. Bring loading mechanism to the STOP (Sub Load) position. (Refer to Item A)
3. Put the Sub Wiper Arm (R) in it's full down position (Sub Wiper Arm should rest on plastic protrusion on the bottom of the right side plate).
4. Install the cassette compartment (without cassette holder) to chassis so that the rectanglar marking (or slot) on the connection gear should be line up with first tooth of the Rack Gear as shown in Figure M61 and M62.

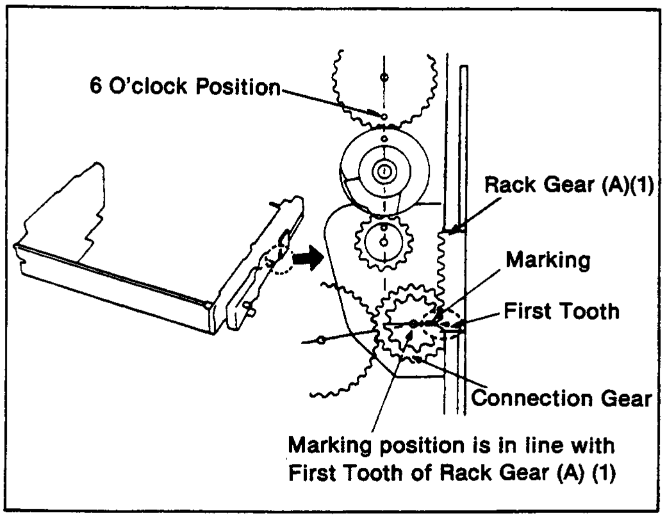

6 O'clock Position
Rack Gear (A)(1)
Marking
First Tooth
Connection Gear
Marking position is in line with
First Tooth of Rack Gear (A) (1)

Figure M61

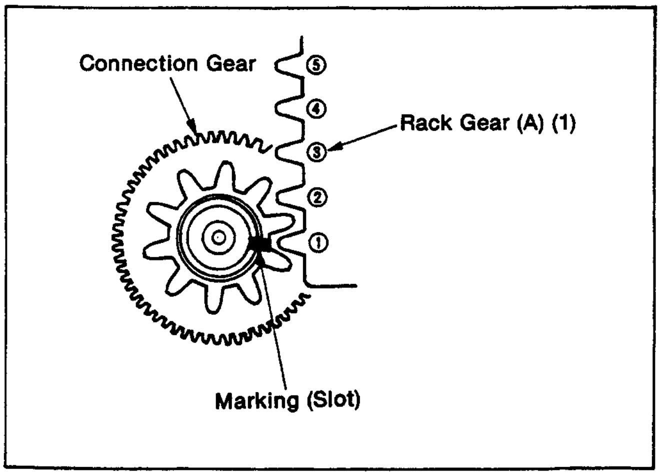

Connection Gear
⑤
④
Rack Gear (A) (1)
③
②
①
Marking (Slot)

Figure M62

5. Tighten the 4 screws (D) as shown in Figure M63.

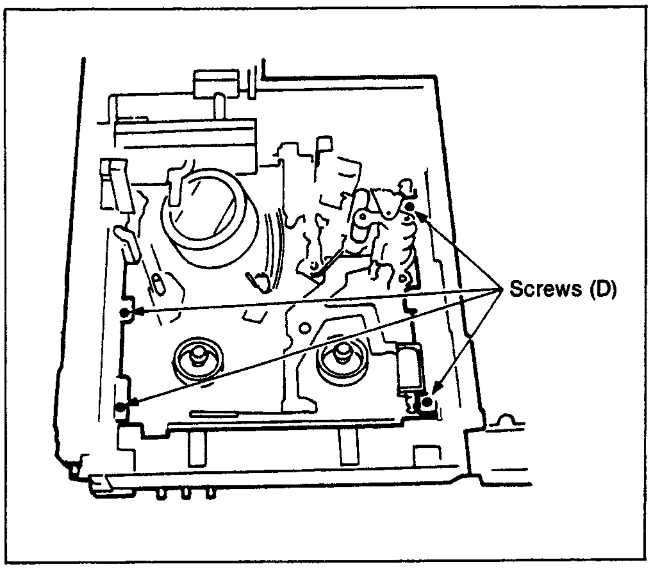


Figure M63

6. Manualy move the loading mechanism toward the EJECT position.
7. Stop the manual eject procedure just before completion, so that the Sub Wiper Arms straight up. This position is also characterized by the channel guides (In the Wiper Arms) being directly under the cut outs on the top of the Cassette Compartment base(Figure M64).
8. Install the Cassette Holder Unit in the Cassette Compartment Base. The Cassette Holder should drop into place if the Sub Wiper Arms are postioned as called for in step 7.

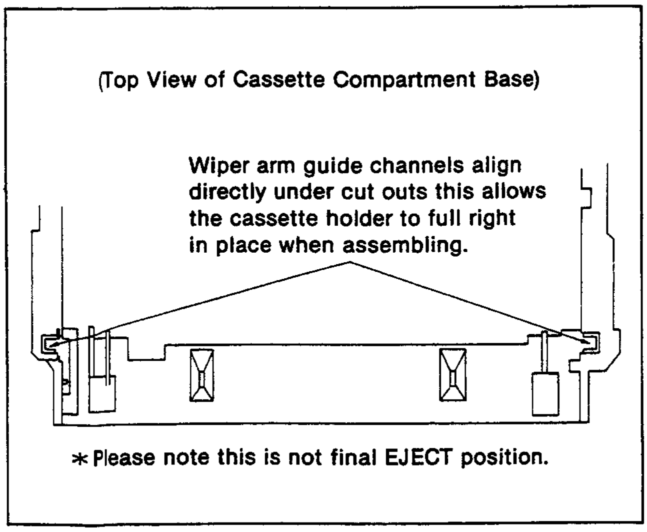

(Top View of Cassette Compartment Base)
Wiper arm guide channels align directly under cut outs this allows the cassette holder to full right in place when assembling.
∗Please note this is not final EJECT position.

Figure M64

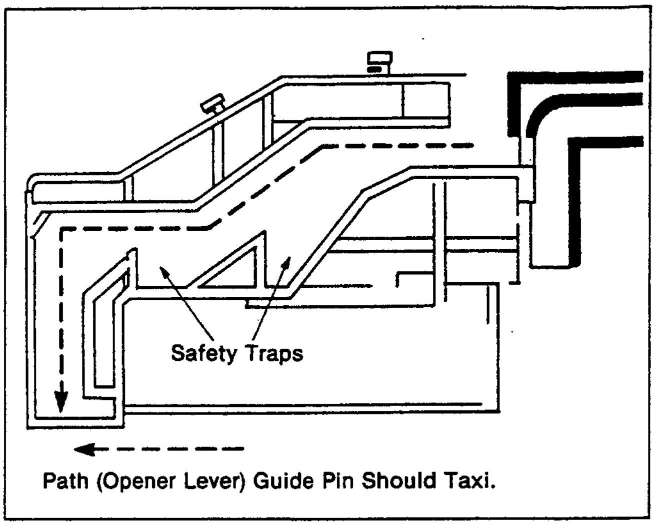

Safety Traps
Path (Opener Lever) Guide Pin Should Taxi.

Figure M65 Right Side Plate

9. Install the top plate on the Cassette Compartment Base and tighten the 2 screws (A) as shown in Figure M57.
10. Manualy confirm that front loading and main loading run smoothly. Also confirm EJECT before power is applied.

ELECTRICAL ADJUSTMENT PROCEDURES

This section provides complete electrical adjustment procedures which may be required for electronic circuits of this S-VHS Video Cassette Recorder.(AG-7330)

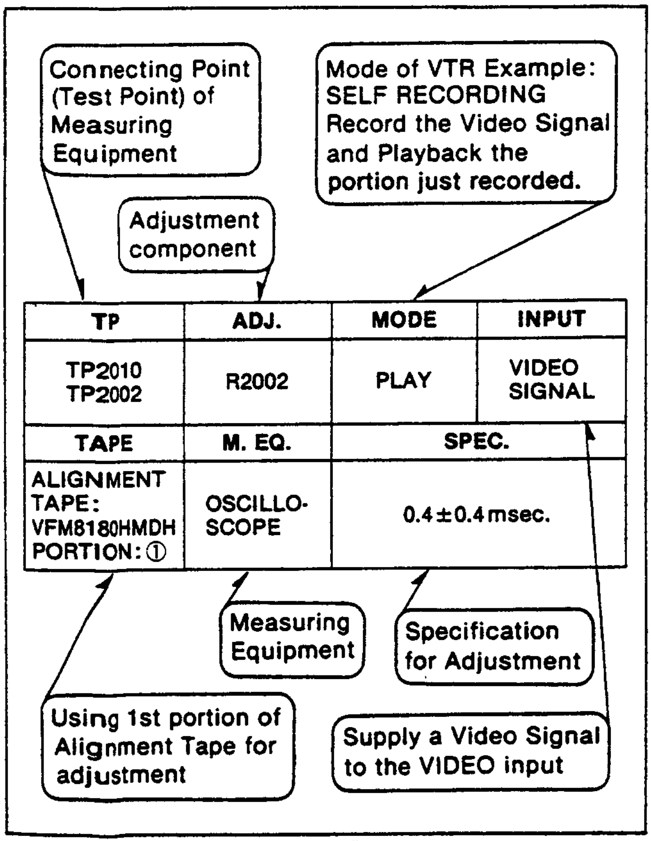
1. TEST AND SERVICE EQUIPMENT

To perform the electrical adjustments completely, the following equipment is required.

1. VTVM(Vacuum Tube Volt Meter) or DVM (Digital Volt Meter)
   Voltage Range: 0.001–50V
2. Dual–Trace Oscilloscope
   Voltage Range: 0.005–50V/div.
   Frequency Range: DC–20MHz
   Probes: 10:1 or 1:1
3. Frequency Counter
   Frequency Range: 0–10MHz
4. Signal Generator(Sine wave)
   Frequency Range: 0–10MHz
5. Video Sweep Generator
   Frequency Range: 0–10MHz
6. Colour Monitor TV
7. Plastic Tip Driver
8. Spectrum Analyzer
9. Video Signal Generator
10. VHS Alignment Tape (PAL : VFM8180HMDH)
11. VHS Alignment Tape (NTSC : VF M8080H2 or VFM8080HQFP)

2. ADJUSTMENT PROCEDURES

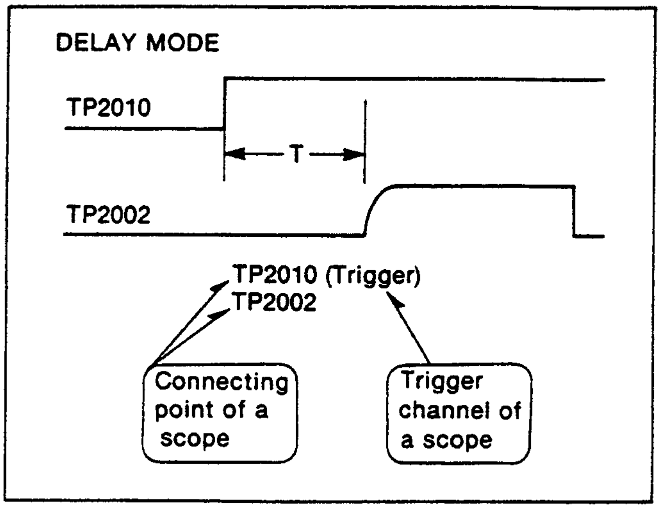
2–1. HOW TO READ THE ADJUSTMENT PROCEDURES



TP	ADJ.	MODE	INPUT
TP2010 TP2002	R2002	PLAY	VIDEO SIGNAL
TAPE	M. EQ.	SPEC.	
ALIGNMENT TAPE: VFM8180HMDH PORTION:①	OSCILLO-SCOPE	0.4±0.4msec.	

Connecting Point (Test Point) of Measuring Equipment
Mode of VTR Example: SELF RECORDING Record the Video Signal and Playback the portion just recorded.
Adjustment component
Measuring Equipment
Specification for Adjustment
Using 1st portion of Alignment Tape for adjustment
Supply a Video Signal to the VIDEO input

Figure E1



DELAY MODE
TP2010
T
TP2002
TP2010 (Trigger)
TP2002
Connecting point of a scope
Trigger channel of a scope

Figure E2

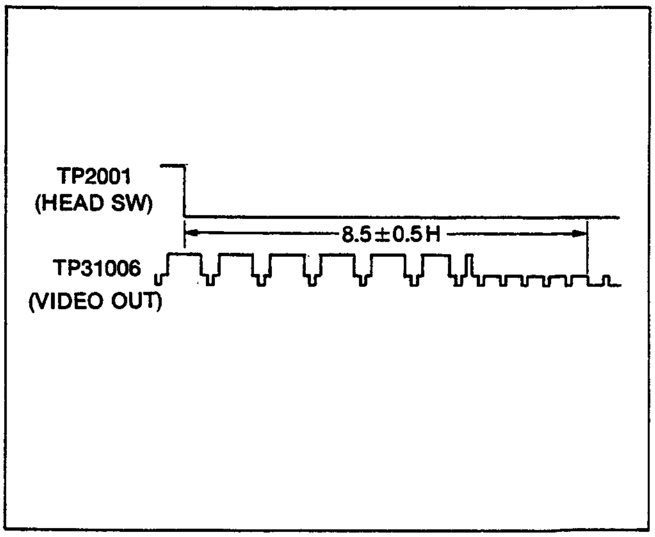
2–2. SERVO SECTION

2–2–1. PG SHIFTER ADJUSTMENT(PAL)

TP	ADJ.	MODE	INPUT
TP31006 TP2001	VR2001	PLAY	
TAPE	M. EQ.	SPEC.	
VFM8180HMDH PORTION:②	OSCILLO-SCOPE	T=8.5H±0.5H	

*Note: This adjustment should be performed only after completion of the tape interchangeability adjustment.

1. Adjust the Tracking VR on the front panel so that the envelope level at TP30011 becomes maximum.



TP2001
(HEAD SW)
8.5±0.5H
TP31006
(VIDEO OUT)

Figure E3

2-2-2. PG SHIFTER ADJUSTMENT (M-NTSC)

TP	ADJ.	MODE	INPUT
TP31006 TP2001	VR2008	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
VFM8080H2 OR VFM8080HQFP PORTION:②	OSCILLO-SCOPE	T_1=6.5H±0.5H	

*Note: This adjustment should be performed only after completion of the tape interchangeability adjustment.

1. Set the TV SYSTEM switch to "NTSC 4.43".
2. Adjust the Tracking VR on the front panel so that the envelope level at TP30011 becomes maximum.

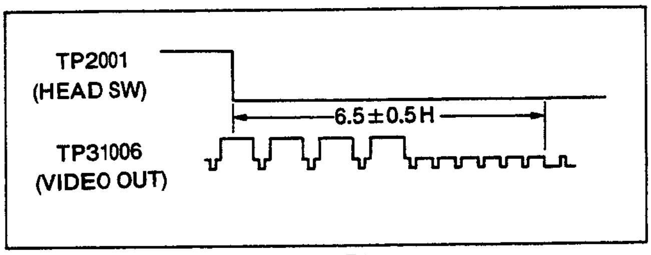


Figure E4

2-2-3. TRACKING FIX ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2001 TP2008	VR2002	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
VFM8180HMDH PORTION:②	OSCILLO-SCOPE	T=0.4±0.1msec.	

*Note: This adjustment should be performed only after completion of the tape interchangeability adjustment.

1. Set the Tracking VR on the front panel to the center fix position.

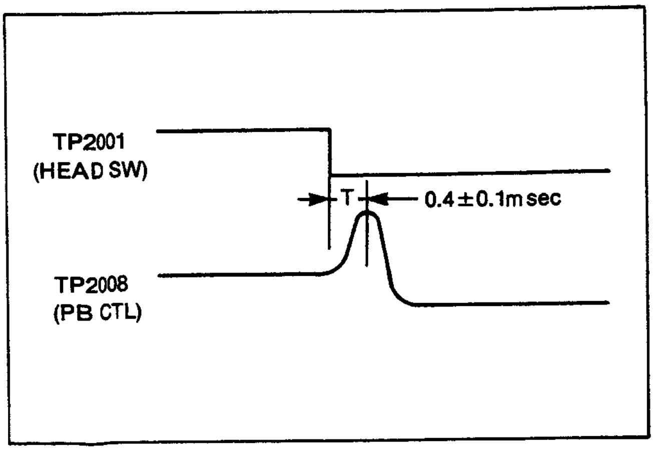


Figure E5

2-2-4. SLOW FREE-RUN ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2011	VR2005	SLOW	
TAPE	**M. EQ.**	**SPEC.**	
VFM8180HMDH PORTION:②	FREQUENCY COUNTER	458Hz±10Hz	

1. Turn the Power Switch OFF.
2. Connect a jumper wire between TP2014 and TP2012 and a frequency counter to TP2011.
3. Turn the Power Switch ON.
4. Place the deck in SLOW mode and adjust VR2005 so that the frequency becomes 458 +/- 10Hz.
5. Turn the Power Switch OFF and disconnect a jumper wire.

2-2-5. SLOW TRACKING ADJUSTMENT

TP	ADJ.	MODE	INPUT
	VR2003 (FWD) VR2004 (REV)	SELF RECORDING SLOW P.B.	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	TV MONITOR	NO NOISE BAND ON TV SCREEN	

1. Turn the Slow Tracking VR on the Front panel to center position.
2. Play back the colour bar signal self-recorded tape by slow (FWD) mode.
3. Adjust VR2003, so that the noise band does not appear on the TV Monitor screen.
4. Play back the self-recorded tape by slow (REV) mode.
5. Adjust VR2004 so that the noise band does not appear on the TV Monitor screen.

2-2-6.V-LOCK ADJUSTMENT (PAL)

TP	ADJ.	MODE	INPUT
	VR2006	SELF RECORDING ↓ STILL	MONOSCOPE SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	TV MONITOR		

1. Play back the monoscope signal self-recorded tape and change to the STILL mode.
2. Adjust VR2006 so that picture stops completely (V-dancing does not appear) on the TV Monitor screen.

2-2-7. V-LOCK ADJUSTMENT (NTSC)

TP	ADJ.	MODE	INPUT
	VR2007	STILL	
TAPE	**M. EQ.**	**SPEC.**	
VFM8080H2 OR VFM8080HQFP PORTION: ②	TV MONITOR		

1. Play back the Alignment Tape (VFM8080H2 or VFM8080HQFP) and change to the STILL mode.
2. Adjust VR2007 so that picture stops completely (V-dancing does not appear) on the TV Monitor screen.

2-3. VIDEO SECTION

2-3-1. AGC LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP31006 (VIDEO OUT)	VR34002	STOP	COLOUR BAR SIGNAL (LINE IN)
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	2.0V±0.05Vp-p	

1. Set the Input Select switch to LINE.

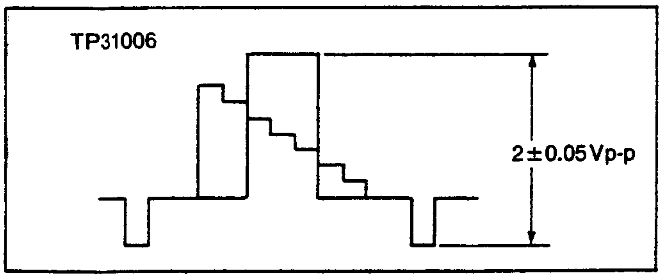


Figure E6

2-3-2. 4P Y OUTPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP31007 (4P Y OUT)	VR35001	STOP	COLOUR BAR SIGNAL (LINE IN)
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	2.0V±0.03Vp-p	

1. Set the Input Select switch to LINE.

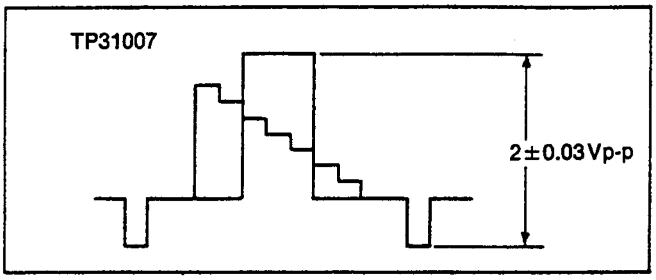


Figure E7

2-3-3. PLL PHASE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP35004 (CH1) TP35005 (Trg.)	VR35003	STOP	COLOUR BAR SIGNAL (LINE IN)
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	A : B=1 : 1±0.1	

1. Set the Input Select switch to LINE.
2. Connect a scope to TP35004 and TP35005 to Ext-Trigger the scope.
3. Adjust VR35003 as shown in Figure E8.

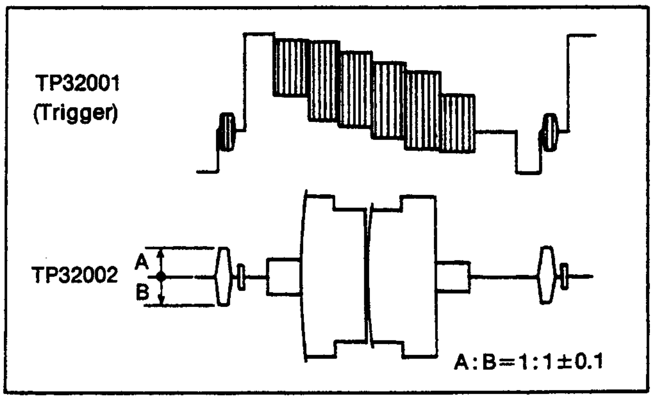


Figure E8

2-3-4. 4P C OUTPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP31008	VR35004	STOP	COLOUR BAR SIGNAL (LINE IN)
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	1.2V±0.06Vp-p	

1. Set the Input Select switch to LINE.

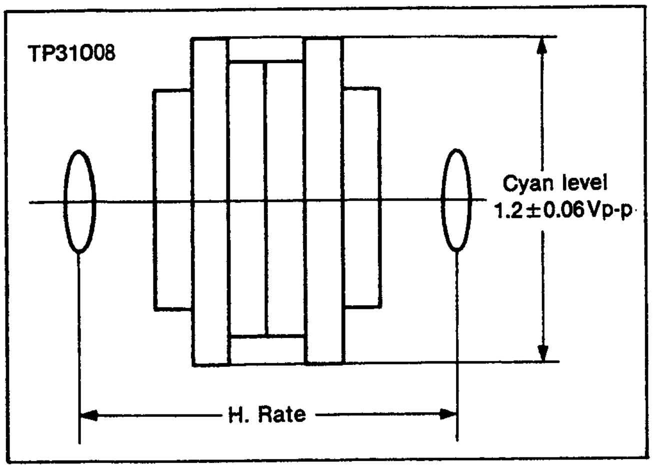


Figure E9

2-3-5. OSD ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP31011	VR31009	STOP	
TAPE	M. EQ.	SPEC.	
	FREQUENCY COUNTER	$f=15.625\,\mathrm{kHz}^{+30}_{-20}\,\mathrm{kHz}$	

1. Connect a jumper wire beween TP31010 and GND.

2-3-6. OSD CHARACTOR SIZE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP31006	C31105	STOP	
TAPE	M. EQ.	SPEC.	
	OSCILLO-SCOPE	T=52μsec.±0.5μsec.	

1. Press the Screen Display and the Down Buttons simultaneously.
   Then the Initial Setting Screen is displayed on the TV monitor.
2. Press the Down Button twice. Then the "AUDIO CH2" line indication will flash.
3. Press the Data Button and select "TIME CODE".
4. Adjust C31105 as shown in Figure E10.

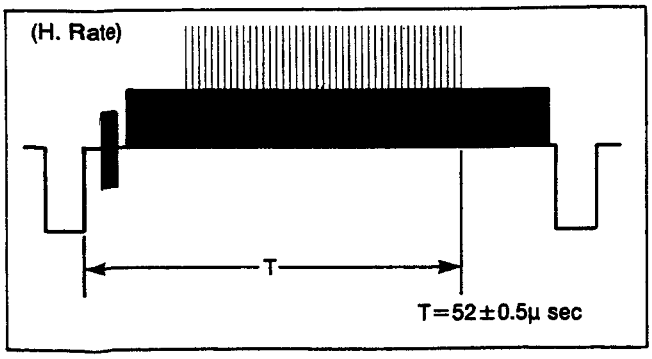


Figure E10

2-3-7. SUB EMPHASIS LIMITTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30003	VR30007	STOP	
TAPE	M. EQ.	SPEC.	
	D.V.M. (DC)	3.48V±0.03V	

2-3-8. S-VHS DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
PIN 25 OF IC30005	VR30003 VR30002	STOP	COLOUR BAR SIGNAL (LINE IN)
TAPE	M. EQ.	SPEC.	
	OSCILLO-SCOPE	REFER TO FIGURE E11, E12	

*Note:
Before this adjustment "2-3-1. AGC Level Adjustment" and "2-3-2. 4P Y Output Level Adjustment" should be completed.

1. Turn the S-VHS switch to ON.
2. Set the Input Select switch to LINE.
3. Supply a colour bar signal to Line input on the rear panel.
4. Connect a scope to pin 25 of IC30005.
5. Turn VR30004 and VR30005 fully clockwise from foil side.
6. Connect a jumper wire between TP30013 and TP30014.
7. Supply a 5.4MHz sinewave signal at 0.2Vp-p to TP30014.
   Set the frequency precisely with a frequency counter.
8. Adjust VR30003 so that the beat on the sync tip portion of the signal becomes minimum as shown in Figure E11.
9. Next supply a 7.0MHz sinewave signal at 0.2Vp-p to TP30014.
   Set the frequency precisely with a frequency counter.
10. Adjust VR30002 so that the beat on the white peak portion of the signal becomes minimum as shown in Figure E12.

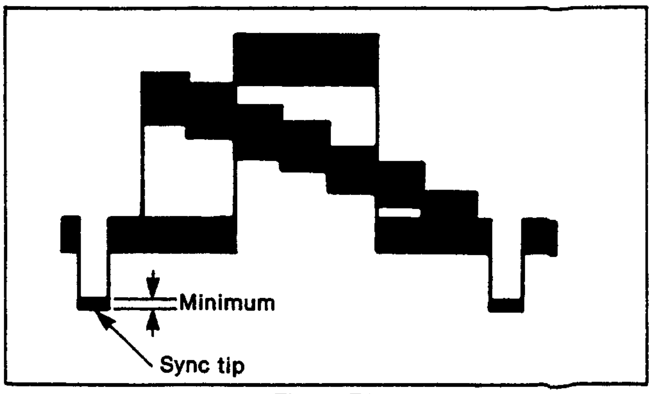


Figure E11

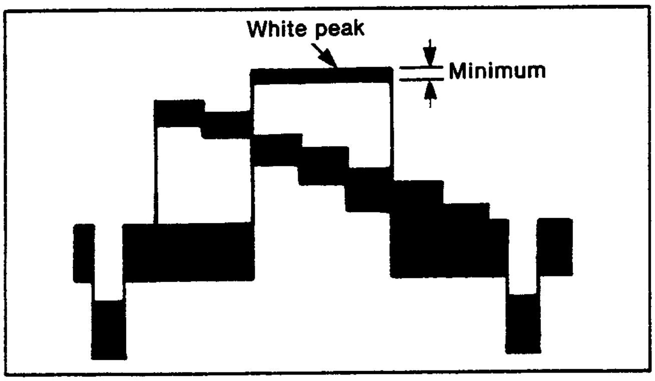


Figure E12

2–3–9. WHITE & DARK CLIP ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30001	VR30004 VR30005	STOP	COLOUR BAR SIGNAL (LINE IN)
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	200±5% (WHITE CLIP) 70±5% (DARK CLIP)	

*Note:
Before this adjustment, "DEVIATION ADJUSTMENT" should be completed.

1. Turn the S–VHS switch ON.

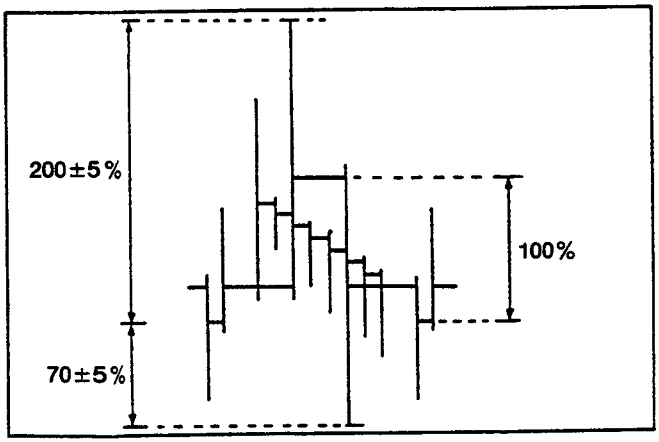


Figure E13

2–3–10. VCO FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30010	VR32001 (Y/C PACK)	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
S-VHS RECORDED TAPE	FREQUENCY COUNTER	f=627±7kHz	

1. Connect a jumper wire between TP31009 and TP30012.

2–3–11. PL BURST PHASE & LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
LINE OUT	C32067 VR32002	STOP (S-VHS)	FLAT FIELD W/BURST
TAPE	**M. EQ.**	**SPEC.**	
	VECTOR SCOPE	90±5 DEGREES TO U (P_B) AXIS	

1. Turn the S–VHS switch ON.
2. Set the TV system switch to PAL.
3. Connect VIDEO OUT on AG–7330 to the CHA input on the vectorscope.
4. Connect TP32005 to EXT CW on the vectorscope.
5. Connect a jumper wire between TP31001 and GND.
6. Connect a jumper wire between TP30011 and TP30012.
7. Connect a jumper wire between TP31002 and TP30009.
8. Set the rectorscope to EXT SYNC mode and REF EXT mode.
9. Adjust C32067 so that the phase of pilot burst is 90 +/– 5 degrees to U (P6) axis as shown in Figure E14.
10. Adjust VR32002 so that the pilot burst level is 110 +/– 5% to the burst level as shown in Figure E14.

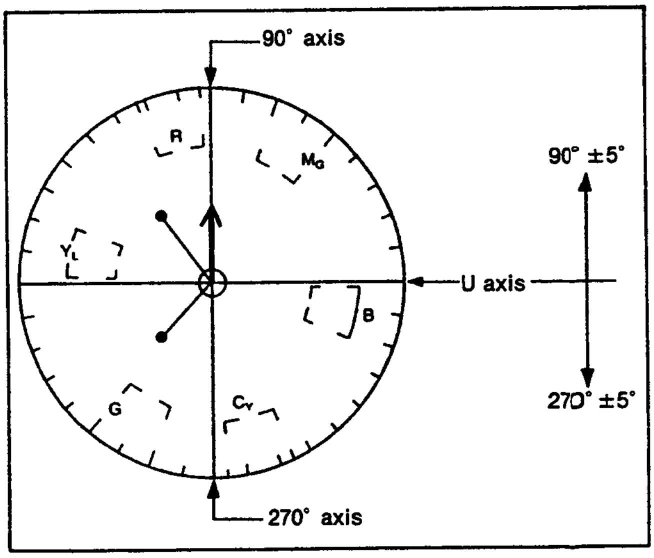


Figure E14

2–3–12. VHS REC CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP5002 (HOT) TP5001 (GND)	VR30008 VR30020	REC (VHS)	COLOUR BAR SIGNAL (LINE IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	36±2mVp-p (C) 145±5mVp-p (Y)	

1. Turn the S–VHS switch OFF.
2. Turn the Hi–Fi REC switch OFF.
3. Connect the scope to TP5002 (HOT) and TP5001 (GND) on the Head Amp C.B.A.

4. Turn VR30008 fully clockwise from foil side.
5. Adjust VR30020 so that the cyan level becomes 36 +/− 2mVp−p as shown in Figure E15.
6. Adjust VR30008 so that the sync tip level becomes 145 +/− 5mVp−p as shown in Figure E15.

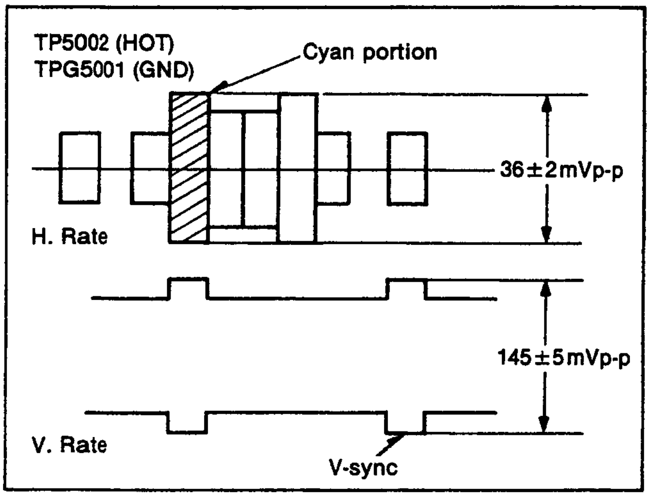

TP5002 (HOT)
TPG5001 (GND)
Cyan portion
36±2mVp-p
H. Rate
145±5mVp-p
V. Rate
V-sync

Figure E15

2−3−13. S−VHS REC CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP5002 (HOT) TP5001 (GND)	VR30006	REC (S-VHS)	COLOUR BAR SIGNAL (LINE IN)
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK TAPE	OSCILLO-SCOPE	150mV±5mVp-p	

*Note:
Before this adjustment, "2−2−12. VHS REC CURRENT ADJUSTMENT" should be completed.

1. Turn the S−VHS switch ON.
2. Turn the Hi−Fi REC switch OFF.
3. Connect the scope to TP5002(HOP) and TP5001(GND) on the Head Amp C.B.A.
4. Adjust VR30006 so that the sync tip level becomes 150 +/− 5mVp−p as shown in Figure E16.

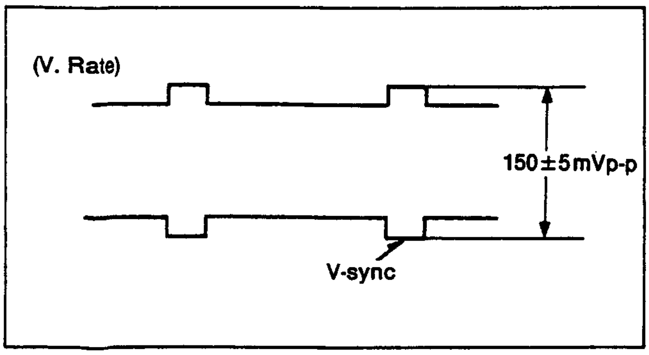

(V. Rate)
150±5mVp-p
V-sync

Figure E16

2−3−14. C.A/D INPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP35006	VR35002	S-VHS SELF RECORDING	COLOUR BAR SIGNAL (LINE)
TAPE	**M. EQ.**	**SPEC.**	
SELF RECORDED TAPE	OSCILLO-SCOPE	1.5±0.1Vp-p	

1. Turn the Tracking VR into center fix position.

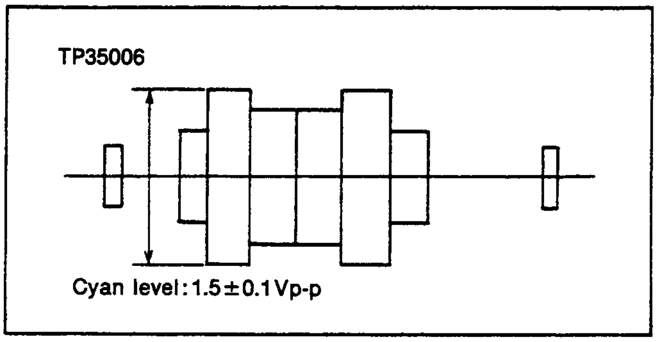

TP35006
Cyan level:1.5±0.1Vp-p

Figure E17

2−3−15. CLOSSTALK CANCEL OUTPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP35003	VR35005	S-VHS SELF RECORDING	COLOUR BAR SIGNAL (LINE)
TAPE	**M. EQ.**	**SPEC.**	
SELF RECORDED TAPE	OSCILLO-SCOPE	700±50mV	

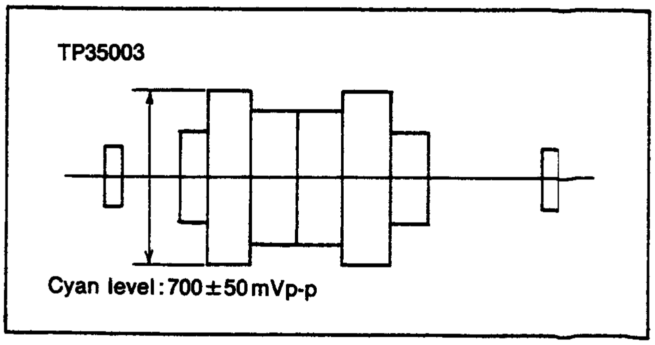

TP35003
Cyan level:700±50mVp-p

Figure E18

2-3-16. RECURSIVE FILTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30008	VR34003 VR34004	S-VHS SELF RECORDING	COLOUR BAR SIGNAL (LINE)
TAPE	**M. EQ.**	**SPEC.**	
SELF RECORDED TAPE	OSCILLO-SCOPE	A=MINIMUM	

1. Adjust VR34003 and VR34004 so that level "A" becomes minimum.

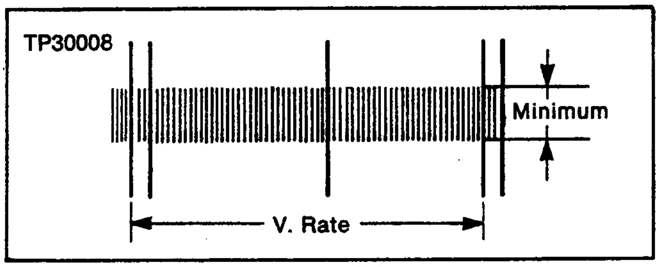


Figure E19

2-3-17. YNR Y BARANCE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP30007	VR34001	S-VHS SELF RECORDING	COLOUR BAR SIGNAL (LINE)
TAPE	**M. EQ.**	**SPEC.**	
SELF RECORDED TAPE	OSCILLO-SCOPE	MINIMUM	

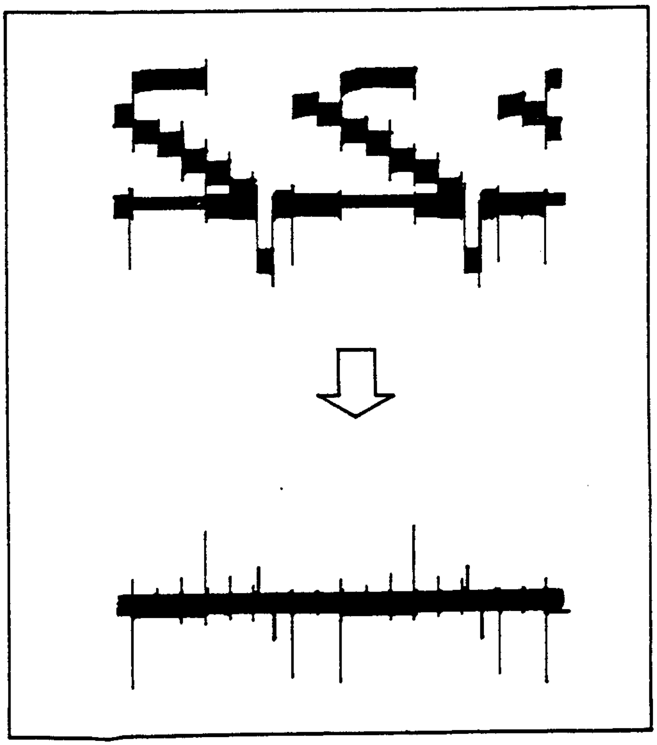


Figure E20

2-3-18. PB LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP31006	VR31008 VR30009 VR30001	S-VHS & VHS SELF RECORDING	COLOUR BAR SIGNAL (LINE)
TAPE	**M. EQ.**	**SPEC.**	
SELF RECORDED TAPE	OSCILLO-SCOPE	VIDEO LEVEL: 2.0V±0.04Vp-p CYAN LEVEL: 1.2V±0.06Vp-p	

1. Play back the colour bar self recorded tape by the VHS mode.
2. Adjust VR31008 so that the video level becomes 2.0 +/- 0.04Vp-p as shown in Figure E21.
3. Play back the colour bar self recorded tape by the S-VHS mode.
4. Adjust VR30009 so that the video level becomes 2.0 +/- 0.04Vp-p.
5. Adjust VR30001 so that the cyan level becomes 1.2 +/- 0.06Vp-p.

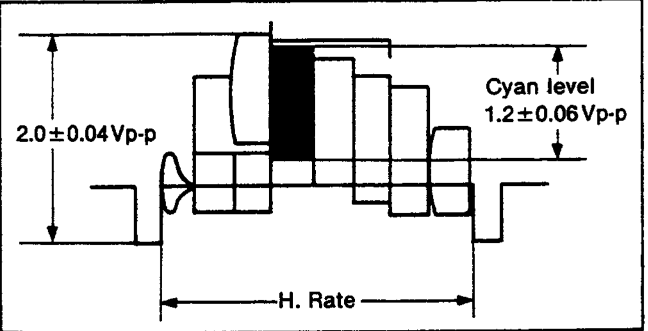


Figure E21

2-3-19. S-VHS PB RF EQ ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP31006 TP30013	VR30013 VR30016	S-VHS SELF RECORDING	VIDEO SWEEP SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
SELF RECORDED TAPE	OSCILLO-SCOPE	$0.1\text{MHz} : 4\text{MHz} = 10 : 7^{+0.3}_{-0.5}$	

1. Supply a Video sweep signal as shown in Figure E22.
2. Set the Input Select switch to S-VIDEO to 4P S-VIDEO input.
3. Record a video sweep signal in S-VHS mode and play back just recorded portion.
4. Set the Image switch to NORM mode and turn the Notch switch OFF.
5. Turn the Picture VR on the Front panel to center position.
6. Connect the scope to TP31006 and keep VR30013 to the center position.
7. Adjust VR30016 and VR30017 as shown in Figure E22.
8. Connect the scope to TP30013 and adjust VR30013 so that the video envelope becomes 600 +/- 30mVp-p.
9. Connect the scope to TP31006 and confirm the spec. as Figure E22.
10. If it is out of spec. repeat step 8 to 9.

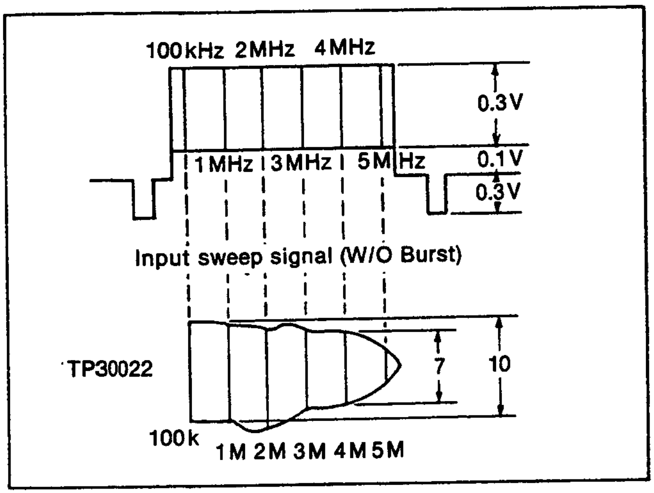


Figure E22

2-3-20. VHS PB RF EQ ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP31006 TP30005	VR30010 VR30011 VR30012	VHS SELF RECORDING	VIDEO SWEEP SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
SELF RECORDED TAPE	OSCILLO-SCOPE	100kHz : 2MHz=1 : 1±0.03	

*Note:
Before this adjustment "2–2–19. S–VHS PB RF EQ ADJUSTMENT" should be completed.

1. Supply a Video sweep signal as shown in Figure E23.
2. Set the Input Select switch to LINE or S–VIDEO.
3. Record a video sweep signal in S–VHS mode and play back just recorded portion.
4. Set the Image switch to NORM mode.
5. Turn the Picture VR on the Front panel to center position.
6. Connect the scope to TP31006 and keep VR30010 to the center position.
7. Adjust VR30011 and VR30012 as shown in Figure E23.
8. Connect the scope to TP30005 and adjust VR30012 so that the video envelope becomes 900mVp–p.
9. Connect the scope to TP31006 and confirm spec as shown in Figure E23.
10. If it is out of spec., repeat step 7 to 9.

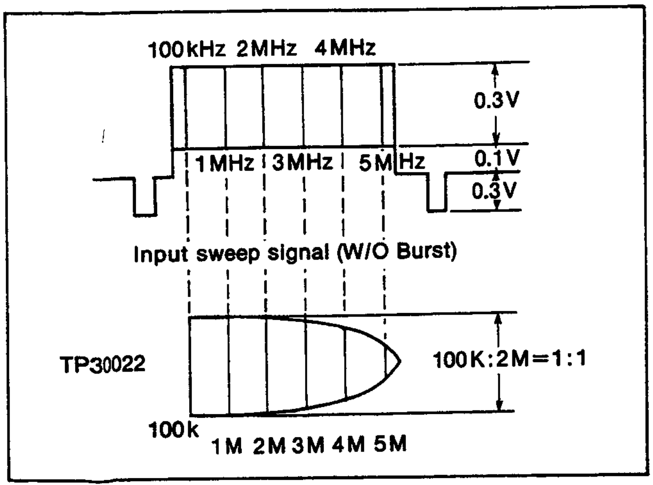


Figure E23

2-3-21. TRACKING METER ADJUSTMENT

TP	ADJ.	MODE	INPUT
	VR30015	S-VHS SELF RECORDING	COLOUR BAR SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
SELF RECORDED TAPE		SEE FIGURE E24	

1. Turn the S–VHS switch ON.
2. Play back the S–VHS colour bar recorded tape.
3. Set the Tracking VR on the Front Panel to the center.
4. Adjust VR30015 so that the Tracking Meter needle reaches 0 +/– 0.5 as shown in Figure E24.

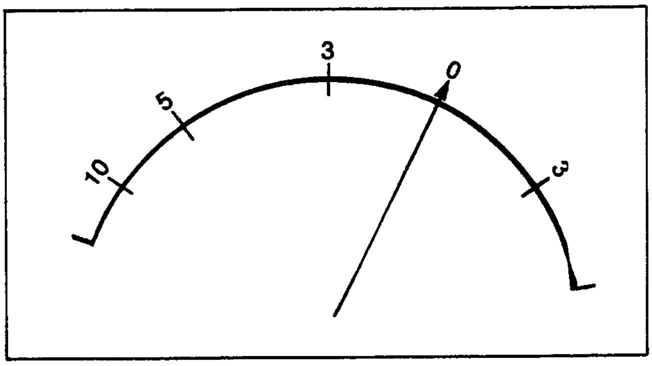


Figure E24

2-4. AUDIO SECTION

2-4-1. PRE-AMP ADJUSTMENT

TP	ADJ.	MODE	INPUT
NORM/HD OUT (CH1/CH2)	NORM HD CH1 VR4003 VR4001 CH2 VR4004 VR4002	STOP (E-E)	1kHz, –8dBv AUDIO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	V.T.V.M	–8dBv±0.2dBv	

1. Set the Audio Level VRs (CH1–NORM/HD, CH2–NORM/HD) on the Front panel to the center position and supply a audio signal –8dBv (=0.41Vrms = 1.13Vp–p), 1KHz to the NORM Input (CH1).
2. Set the Audio out select switch on the Front panel to Hi–Fi/Auto.
3. Adjust VR4001 (Hi–Fi–CH1) and VR4002 (Hi–Fi–CH2) so that the level at the NORM/Hi–Fi Output (CH1,CH2) become –8dBv (=0.41Vrms =1.13Vp–p) +/– 0.2dBv.
4. Set the Audio out select switch to NORM.
5. Adjust VR4003 (NORM–CH1) and VR4004 (NORM –CH2) so that the level at the NORM/Hi–Fi Output (CH1,CH2) become –8dBv (=0.41Vrms =1.13Vp–p) +/– 0.2dBv.

2-4-2. AUDIO METER ADJUSTMENT

TP	ADJ.	MODE	INPUT
AUDIO METER	VR4013 (CH1) VR4014 (CH2)	STOP (E-E)	1kHz, −8dBv AUDIO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
		0±0.5VU	

*Note:
Before this adjustment, "AUDIO INPUT LEVEL ADJUSTMENT" should be completed.

1. Set the AUDIO LEVEL VRs (CH1-NORM/Hi-Fi, CH2-NORM/Hi-Fi) on the front panel to the center position and supply an audio signal −8dB(=0.41Vrms=1.13Vp-p), 1KHz to the NORM/Hi-Fi input (CH1, CH2).
2. Set the Audio Limiter and the Dolby NR to OFF.
3. Set the CH2 Meter switch to Audio CH2.
4. Set the Audio Monitor (Meter) switch to Hi-Fi.
5. Adjust VR4013 (CH1) and VR4014 (CH2) so that the needle of Audio Level Metes (CH1, CH2) indicate OVU as shown in Figure E25.

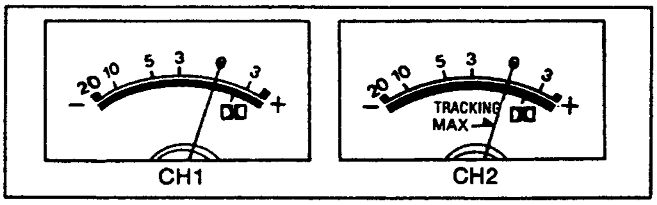


Figure E25

2-4-3. PB FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4001 (CH1) TP4002 (CH2)	VR4005 (CH1) VR4007 (CH2)	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
VFM8180HMDH PORTION: ③	OSCILLO-SCOPE	400Hz AND 5kHz PORTIONS SHOULD BE SAME LEVEL (0±0.5dB)	

*Note:
Before attempting to adjust the Audio Frequency Response, set the VR4006 and VR4008 to the centre position.

1. The gains of 400Hz and 5KHz portions should be the same level (0 +/− 0.5dB).

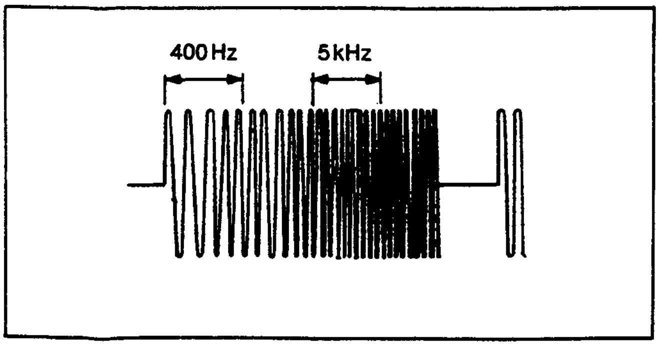


Figure E26

2-4-4. PLAYBACK GAIN ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4001 (CH1) TP4002 (CH2)	VR4006 (CH1) VR4008 (CH2)	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
VFM8180HMDH PORTION: ③	V.T.V.M	300±15mVp-p (CH1) 310±15mVp-p (CH2)	

*Note:
Before this adjustment "Audio playback Frequency Response Adjustment" should be completed.

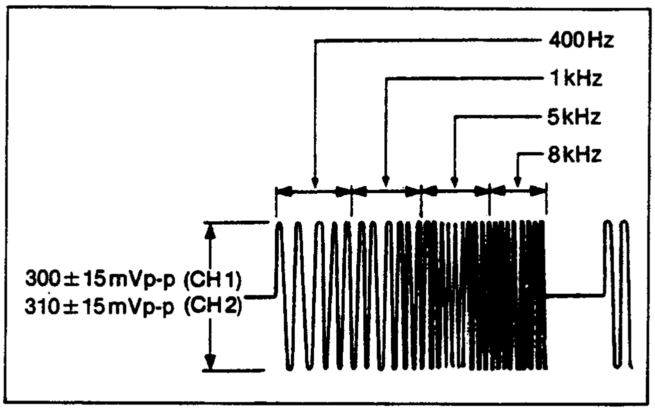


Figure E27

2-4-5. AUDIO BIAS CURRENT ADJUSTMENT (S-VHS)

TP	ADJ.	MODE	INPUT
A/C HEAD	VR4016 (CH1) VR4017 (CH2)	REC	
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK	V.T.V.M OR OSCILLO-SCOPE	6.0±0.1mVrms (=17.0mVp-p)	

1. Turn the S-VHS switch ON.
2. Connect a VTVM to the A/C Head as shown in Figure E28.

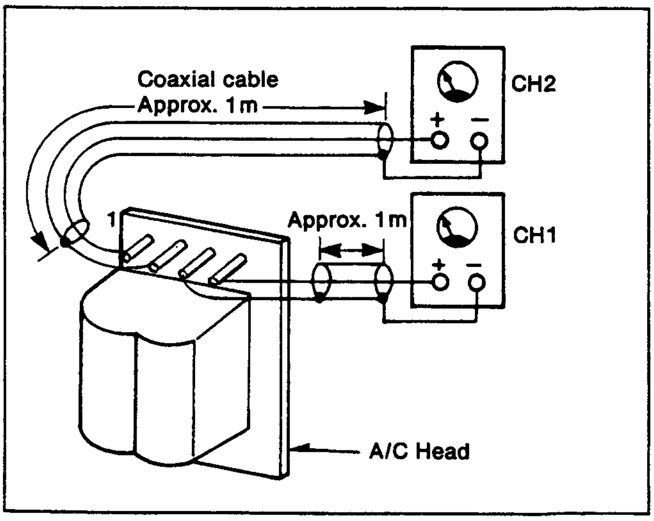


Figure E28

2-4-6. AUDIO BIAS CURRENT ADJUSTMENT (VHS)

TP	ADJ.	MODE	INPUT
A/C HEAD	VR4009 (CH1) VR4010 (CH2)	REC	
TAPE	**M. EQ.**	**SPEC.**	
VHS BLANK	V.T.V.M OR OSCILLO-SCOPE	4.4±0.1mVrms (=12.5mVp-p)	

1. Turn the S-VHS switch OFF.
2. Connect a VTVM to the A/C Head as shown in Figure E28.

2-4-7. NORMAL AUDIO REC CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP40005 (CH1) TP40006 (CH2) AUDIO OUT (NORM/Hi-Fi, CH1/CH2)	VR4011 (CH1) VR4012 (CH2)	REC ↓ PLAY	−8dBv, 1kHz AUDIO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK	V.T.V.M		

1. Connect the VTVMs to the deck as shown in Figure E29. Note that only 1 channel will be adjusted at a time.
2. Supply an audio signal to NORM/Hi-Fi CH1.
3. Place the deck in the REC mode with S-VHS mode.
4. Adjust VR4011 (CH1) so that VTVM2 reads approximately 460mVrms.
   Suppose that the indicated Value on VTVM1 is 0dBv.
5. Play back the recorded portion, and note the amount of difference in VTVM1 between REC mode and PLAY mode.
6. Place the deck in the REC mode again, and readjust VR4011 (CH1) slightly, and repeat step 5, nothing the new difference.
7. Repeat this "Record/Set/Note~Playback/Note sequence until the difference between the VTVM1 record and playback readings is minimized (0 +/− 1dBv).
8. Repeat the above procedure again for channel 2 using the other set of test points and VRs.
9. Replace the S-VHS cassette with a VHS cassette tape and confirm that the level are within the range of −1dBv to +2dBv.

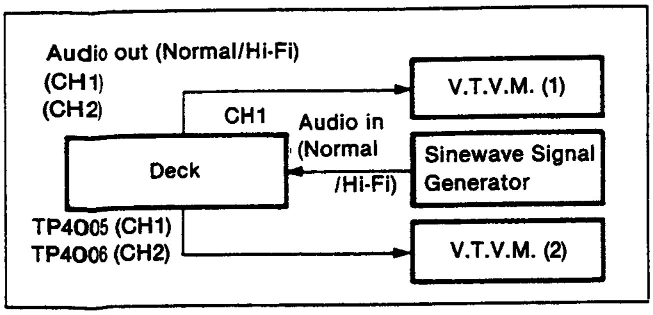


Figure E29

2-4-8. TIME CODE METER ADJUSTMENT

TP	ADJ.	MODE	INPUT
AUDIO (CH2) LEVEL METER	VR4015	REC	SINE WAVE 2kHz, 1Vp-p
TAPE	**M. EQ.**	**SPEC.**	
BLANK		0±0.5VU	

1. Connect the sinewave generator to the time code input, and set the output to 2 KHz, 1 Vp−p.
2. Display the function on OSD, and set the AUDIO CH2 Selection to the TIME CODE.
3. Adjust VR4015 so that the CH2 Level meter indicates "0 +/− 0.5" point.

2-5. Hi-Fi AUDIO SECTION

2-5-1. HEAD SWITCHING SHIFTER ADJUSTMENT (NTSC)

TP	ADJ.	MODE	INPUT
TP6, TP7 ON TP C.B.A.	VR4611	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
VFM8080HQFP PORTION: ①	OSCILLO-SCOPE	FIGURE E30	

1. Set the TV System select switch to NTSC 4.43.
2. Connect a scope to TP7 (CH1 RF) and TP6 (Head SW pulse) to Ext-Trigger the scope on the Test Point C.B.A.
3. Play back the Alignment tape (VFM8080HQFP) portion 1.
4. Adjust the Tracking VR so that the level becomes maximum and VR4612 to center position.
5. Adjust VR4611 so that there is no drop-out between Lch head output and Rch one as shown in Figure E30.

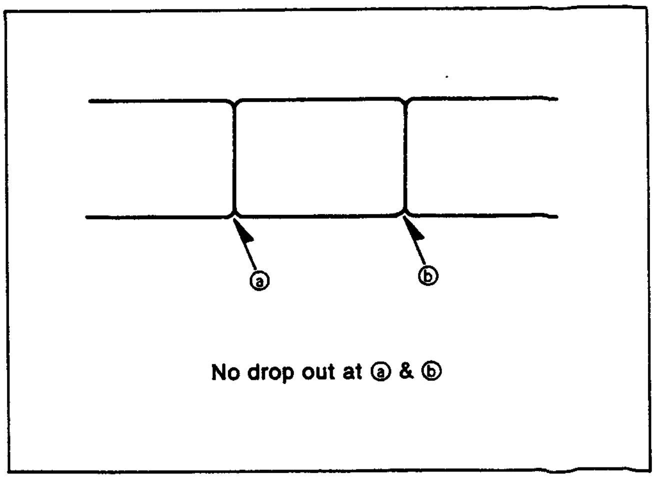


Figure E30

2–5–2. HEAD SWITCHING SHIFTER ADJUSTMENT (PAL)

TP	ADJ.	MODE	INPUT
TP6, TP7 ON TP C.B.A.	VR4613	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
VFM8180HMDH PORTION: ②	OSCILLO-SCOPE	FIGURE E30	

1. Set the TV System select switch to PAL.
2. Connect a scope to TP7 (CH1RF) and TP6 (Head SW pulse) to Ext–Trigger the scope on the Test Point C.B.A.
3. Play back the Alignment tape (VFM8180HMDH) portion 2.
4. Adjust the Tracking VR so that the level becomes maximum and VR4612 to CENTER POSITION.
5. Adjust VR4613 so that there is no drop–out between Lch head output and Rch one as shown in Figure E30.

2–5–3. CARRIER FREQUENCY ADJUSTMENT (PAL)

TP	ADJ.	MODE	INPUT
TP4603 (CH1) TP4604 (CH2)	VR4601 (CH1) VR4603 (CH2)	STOP (E-E)	
TAPE	**M. EQ.**	**SPEC.**	
	FREQUENCY COUNTER	f_L=1.4MHz±10kHz (TP4603) f_R=1.8MHz±10kHz (TP4604)	

1. Connect to the Hi–Fi input (CH1, CH2) to GND.
2. Set the TV System Select switch to PAL.

*Note:
If signal level is too low to trigger the frequency counter, turn VR4607 (CH1) and VR4608 (CH2) clockwise.
Refer to "Hi–Fi AUDIO REC CURRENT ADJUSTMENT" for the current setting of there VRs, after this adjustment.

2–5–4. CARRIER FREQUENCY ADJUSTMENT (NTSC)

TP	ADJ.	MODE	INPUT
TP4603 (CH1) TP4604 (CH2)	VR4602 (CH1) VR4604 (CH2)	STOP (E-E)	
TAPE	**M. EQ.**	**SPEC.**	
	FREQUENCY COUNTER	f_L=1.3MHz±10kHz (TP4603) f_R=1.7mHz±10kHz (TP4604)	

1. Connect to the Hi–Fi input (CH1, CH2) to GND.
2. Set the TV System Select switch to PAL.

*Note:
If signal level is too low to trigger the frequency counter, turn VR4607 (CH1) and VR4608 (CH2) clockwise.
Refer to "Hi–Fi AUDIO REC CURRENT ADJUSTMENT" for the current setting of there VRs, after this adjustment.

2–5–5. DEVIATION ADJUSTMENT

*Note:
This adjustment should be performed only after adjusting the "2–5–4. Hi–Fi AUDIO CARRIER FREQUENCY ADJUSTMENT".

2–5–5–1. Factory & Leagal Adjustment

TP	ADJ.	MODE	INPUT
TP4603 (CH1) TP4604 (CH2)	VR4605 (CH1) VR4606 (CH2)	STOP (E-E)	−8dBv, 1kHz AUDIO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	SPECTRUM ANALYZER	FW=100±5kHz	

1. Supply an audio signal −8dBv (=0.41Vrms=1.13 Vp–p), 1KHz to NORM/Hi–Fi–CH1 Input.
2. Connect the spectrum analyzer to TP4603, and set the center frequency to 1.4MHz.
3. Adjust VR4605 so that the width of the "FW" portion becomes 100 +/− 5KHz. (Figure E31).
4. Change the probe of the spectrum analyzer from TP4603 to TP4604, and the center frequency to 1.8 MHz.
5. Adjust VR4606 so that the width of the "FW" portion becomes 100 +/− 5KHz. (Figure E31)

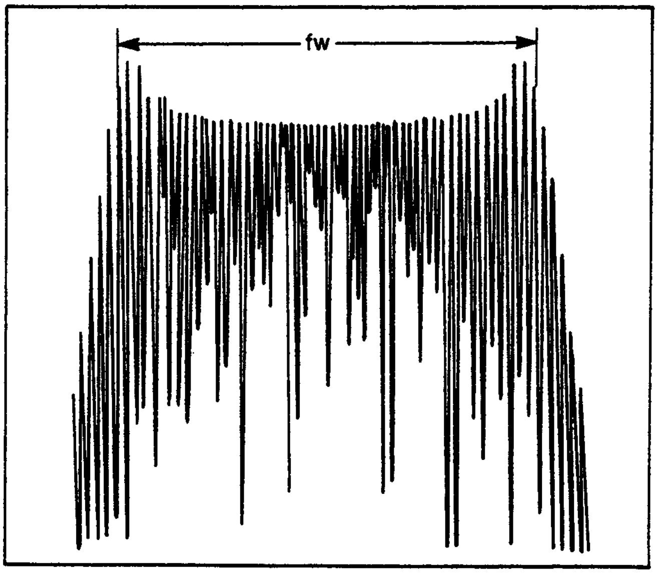


Figure E31

2-5-5-2. Field Adjustment

TP	ADJ.	MODE	INPUT
VR4605 (CH1) VR4606 (CH2)	VR4605 (CH1) VR4606 (CH2)	STOP (E-E)	−8dBv, 1kHz AUDIO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	60mV±10mVp-p	

1. Supply an audio signal −8dBv (=0.41Vrms=1.13 Vp−p), 1KHz to NORM/Hi−Fi−CH1 Input.
2. Connect a scope to pin 1 (HOT) and pin 3 (GND) as shown in Figure E32.
3. Adjust VR4605 so that the level of the sinwave signal becomes 60mV +/− 10mVp−p.
4. Connect a scope to pin 3 (HOT) and pin 1 (GND) as shown in Figure E32.
5. Adjust VR4606 so that the level of the sinwave signal becomes 60mV +/−10mVp−p.

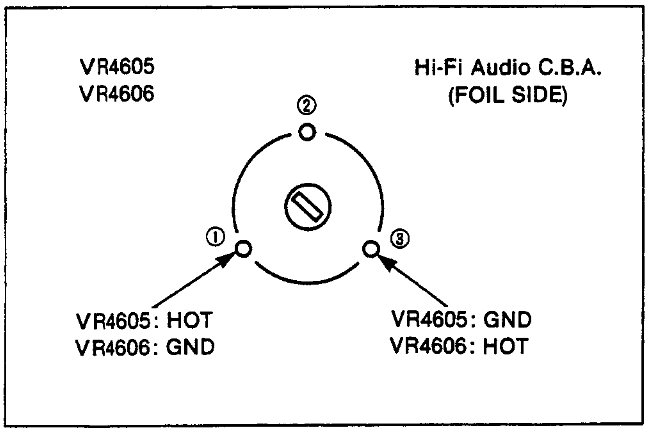


Figure E32

2-5-6. REC CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4701	VR4607 (CH1) VR4608 (CH2)	REC	VIDEO SIGNAL, NORM/ Hi-Fi INPUT (CH1 & CH2) SHORT
TAPE	**M. EQ.**	**SPEC.**	
BLANK	OSCILLO-SCOPE	CH1: 50±5mVp-p CH2: 220±5mVp-p	

1. Set the Hi−Fi REC switch to ON.
2. Supply a video signal to the Video Input.
3. Place the deck in REC mode and turn VR4608 to counterclockwise from foil side.
4. Adjust VR4607 so that the peak level becomes 50 +/− 5mVp−p. (Figure E32)
5. Adjust VR4608 so that the peak level becomes 220 +/− 5mVp−p. (Figure E33)

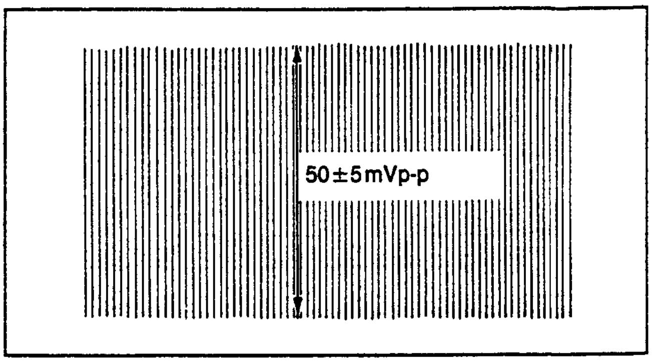


Figure E33

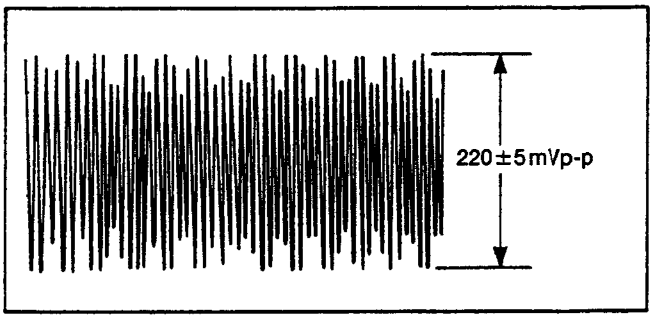


Figure E34

2-5-7. MUTING LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
Hi-Fi AUDIO OUT	VR4612	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
VFM8180HMDH PORTION: ②	OSCILLO-SCOPE		

1. Connect the scope CH1 to the Hi−Fi CH1 output, and play back the alignment tape (VFM8180HMDH).
2. Adjust VR4612 slowly clockwise from component side until the Hi−Fi audio signal at the Hi−Fi Audio Output is muted off.
3. Connect a scope to TP7 on the Test Point C.B.A. and measure the level of Hi−Fi Audio FM envelope "A". (Figure E35)
4. Adjust VR4612 so that the level of Hi−Fi Audio FM envelope becomes 3.3 times of "A" level. (Figure E35)

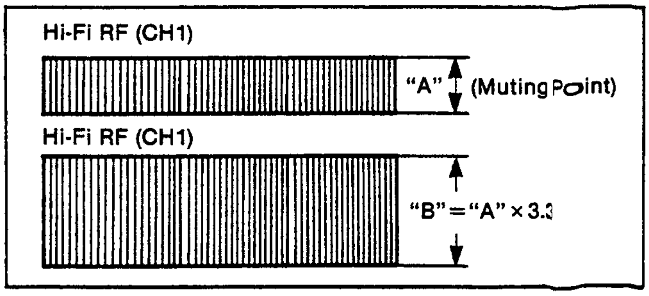
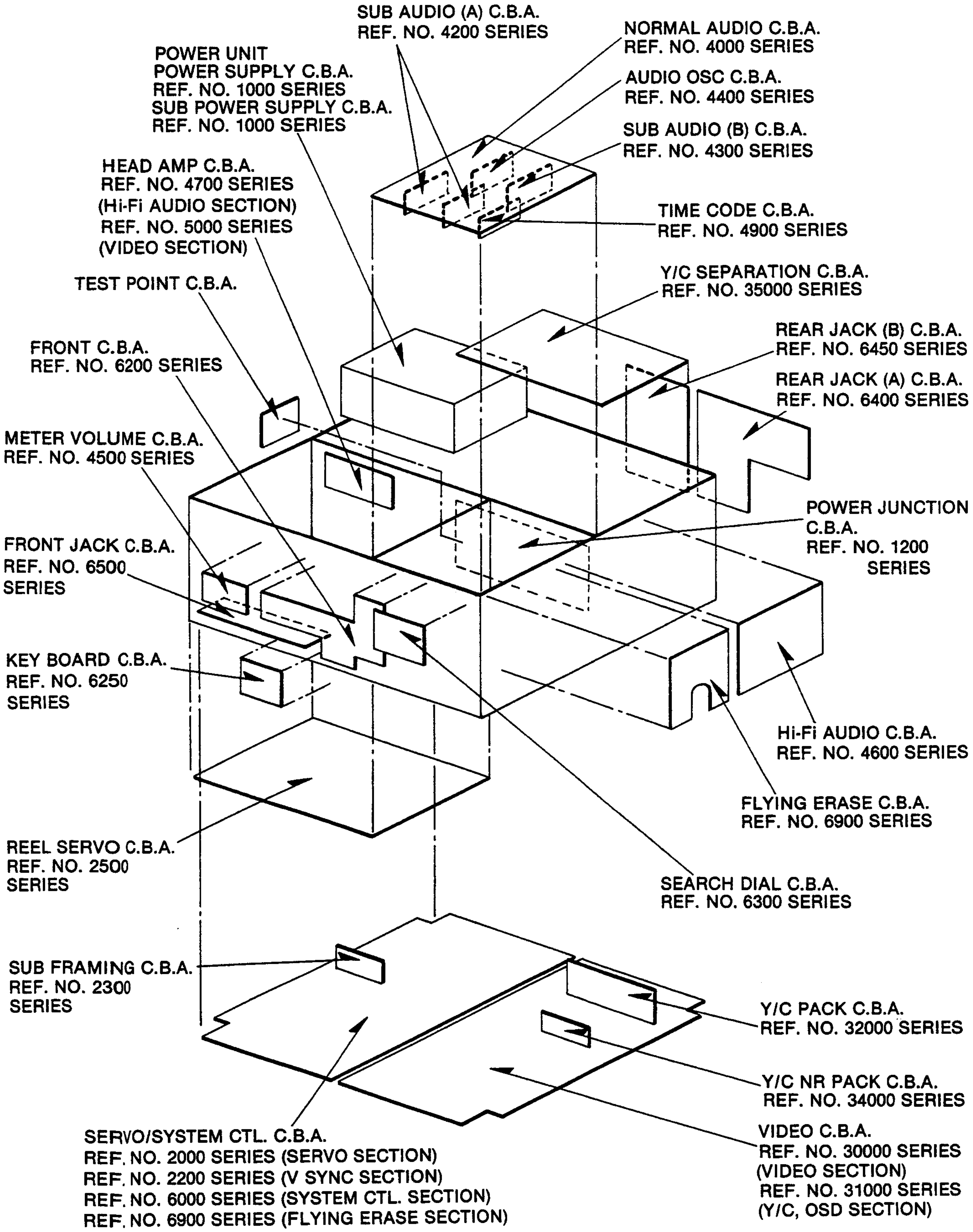
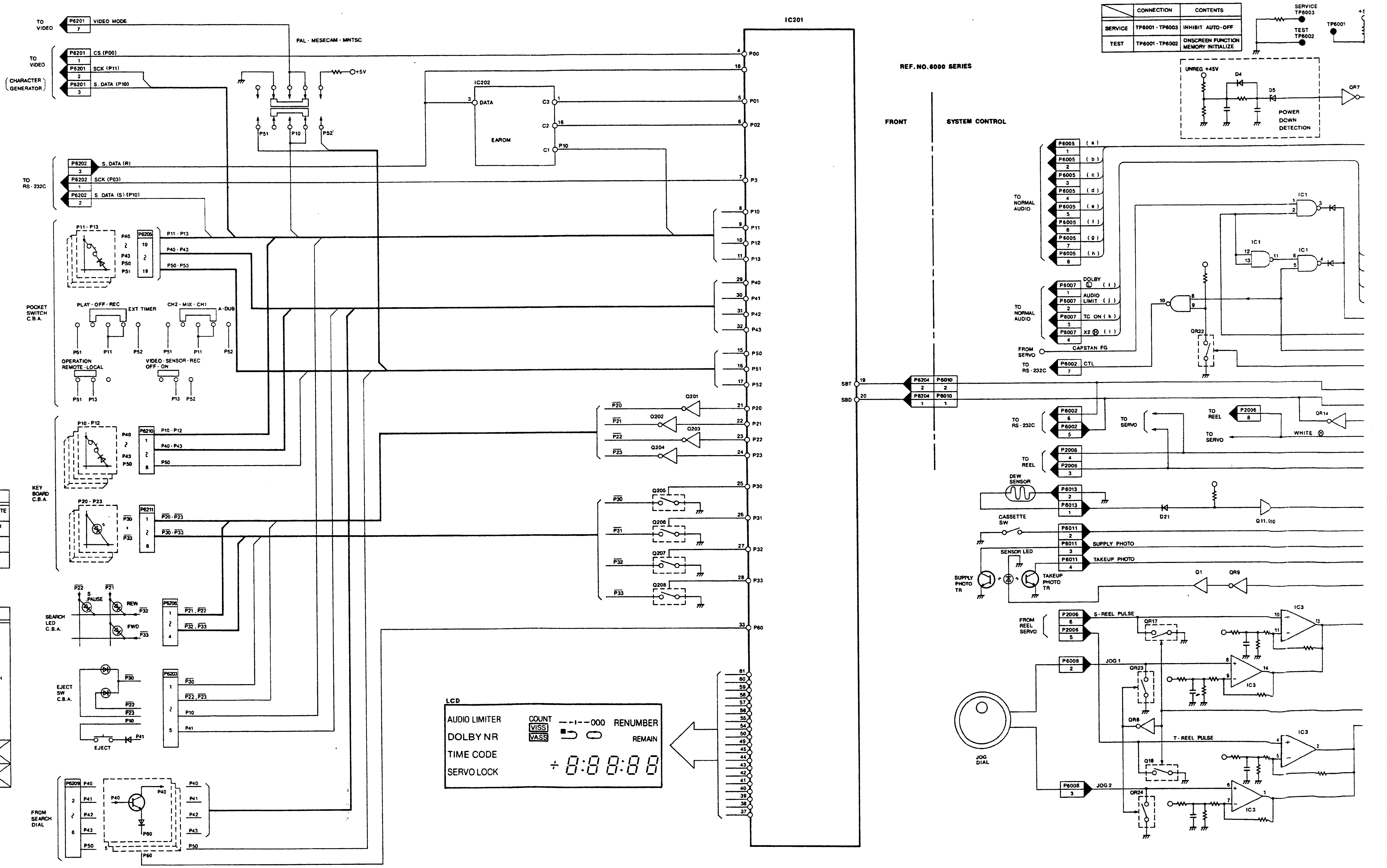


Figure E35

CIRCUIT BOARD LAYOUT


SUB AUDIO (A) C.B.A.
REF. NO. 4200 SERIES
POWER UNIT
POWER SUPPLY C.B.A.
REF. NO. 1000 SERIES
SUB POWER SUPPLY C.B.A.
REF. NO. 1000 SERIES
NORMAL AUDIO C.B.A.
REF. NO. 4000 SERIES
AUDIO OSC C.B.A.
REF. NO. 4400 SERIES
SUB AUDIO (B) C.B.A.
REF. NO. 4300 SERIES
HEAD AMP C.B.A.
REF. NO. 4700 SERIES
(Hi-Fi AUDIO SECTION)
REF. NO. 5000 SERIES
(VIDEO SECTION)
TIME CODE C.B.A.
REF. NO. 4900 SERIES
TEST POINT C.B.A.
Y/C SEPARATION C.B.A.
REF. NO. 35000 SERIES
FRONT C.B.A.
REF. NO. 6200 SERIES
REAR JACK (B) C.B.A.
REF. NO. 6450 SERIES
REAR JACK (A) C.B.A.
REF. NO. 6400 SERIES
METER VOLUME C.B.A.
REF. NO. 4500 SERIES
POWER JUNCTION
C.B.A.
REF. NO. 1200
SERIES
FRONT JACK C.B.A.
REF. NO. 6500
SERIES
KEY BOARD C.B.A.
REF. NO. 6250
SERIES
Hi-Fi AUDIO C.B.A.
REF. NO. 4600 SERIES
FLYING ERASE C.B.A.
REF. NO. 6900 SERIES
REEL SERVO C.B.A.
REF. NO. 2500
SERIES
SEARCH DIAL C.B.A.
REF. NO. 6300 SERIES
SUB FRAMING C.B.A.
REF. NO. 2300
SERIES
Y/C PACK C.B.A.
REF. NO. 32000 SERIES
Y/C NR PACK C.B.A.
REF. NO. 34000 SERIES
SERVO/SYSTEM CTL. C.B.A.
REF. NO. 2000 SERIES (SERVO SECTION)
REF. NO. 2200 SERIES (V SYNC SECTION)
REF. NO. 6000 SERIES (SYSTEM CTL. SECTION)
REF. NO. 6900 SERIES (FLYING ERASE SECTION)
VIDEO C.B.A.
REF. NO. 30000 SERIES
(VIDEO SECTION)
REF. NO. 31000 SERIES
(Y/C, OSD SECTION)

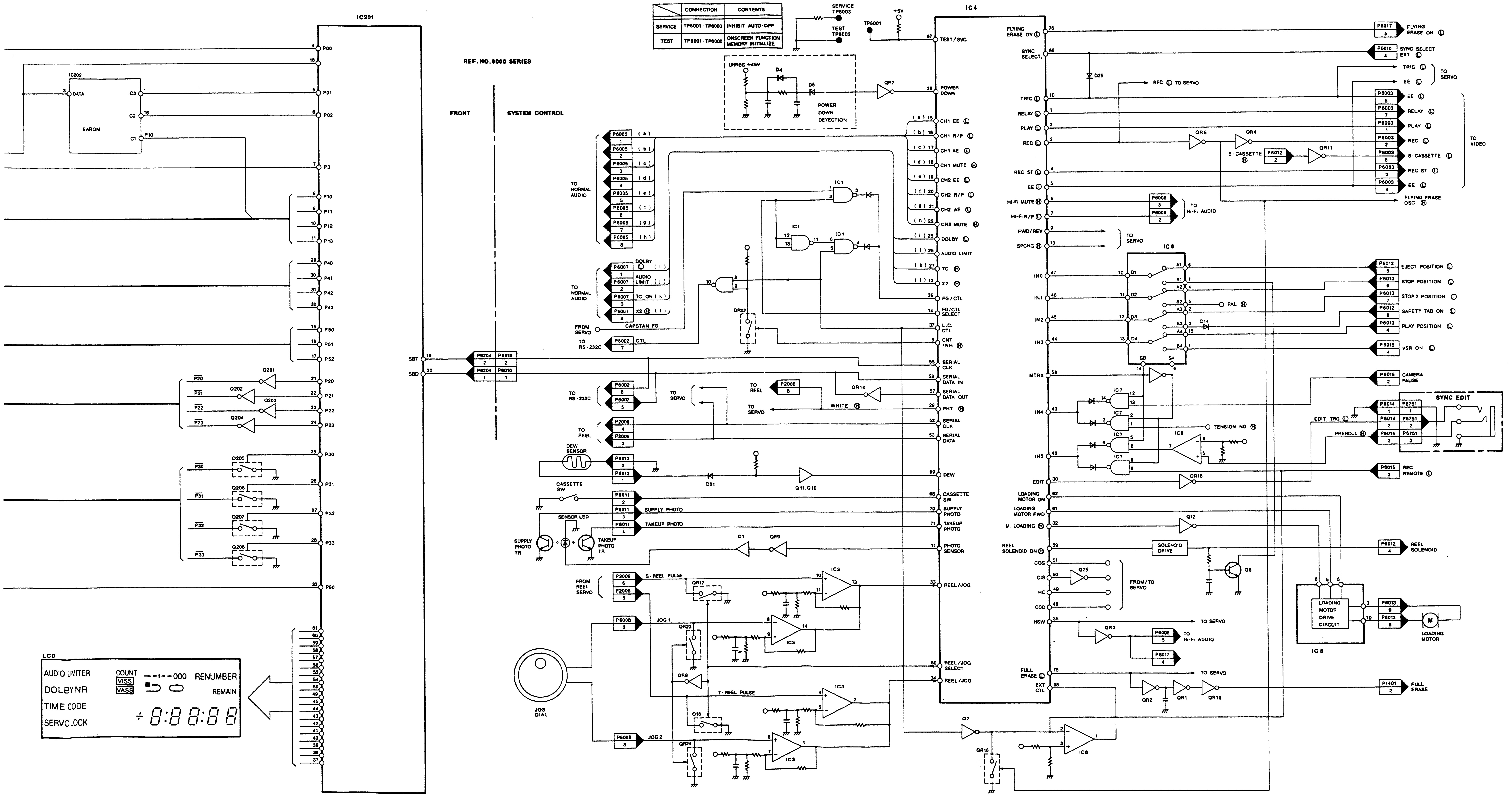
SYSTEM CONTROL BLOCK DIAGRAM


TO VIDEO
P6201 VIDEO MODE
PAL · MESECAM · MNTSC
CS (P00)
SCK (P11)
S. DATA (P10)
CHARACTER GENERATOR
IC201
IC202
DATA
EAROM
+5V
P51 P10 P52
TO RS-232C
P6202
S. DATA (R)
SCK (P03)
S. DATA (S) (P10)
P00 P01 P02 P3 P10 P11 P12 P13 P40 P41 P42 P43 P50 P51 P52 P20 P21 P22 P23 P30 P31 P32 P33 P60
POCKET SWITCH C.B.A.
P11 - P13
P6205
P40 - P43
P50 - P53
PLAY · OFF · REC
EXT TIMER
CH2 · MIX · CH1
A · DUB
OPERATION REMOTE · LOCAL
VIDEO · SENSOR · REC OFF · ON
KEY BOARD C.B.A.
P10 - P12
P6210
P20 - P23
P6211
Q201 Q202 Q203 Q204 Q205 Q206 Q207 Q208
SEARCH LED C.B.A.
S PAUSE
REW
FWD
P6206
EJECT SW C.B.A.
EJECT
P6203
FROM SEARCH DIAL
P6209
LCD
AUDIO LIMITER
DOLBY NR
TIME CODE
SERVO LOCK
COUNT
VISS
VASS
RENUMBER
REMAIN
SBT
SBD
REF. NO. 6000 SERIES
FRONT
SYSTEM CONTROL
SERVICE TP6003
TEST TP6002
TP6001
UNREG +45V
D4
D5
POWER DOWN DETECTION
QR7
TO NORMAL AUDIO
P6005
IC1
P6007
DOLBY
AUDIO LIMIT
TC ON
X2
FROM SERVO
CAPSTAN FG
TO RS-232C
P6002 CTL
P6204 P6010
TO REEL
TO SERVO
P2006
QR14
WHITE
QR22
DEW SENSOR
P6013
D21
Q11, Q10
CASSETTE SW
P6011
SUPPLY PHOTO
TAKEUP PHOTO
SENSOR LED
SUPPLY PHOTO TR
TAKEUP PHOTO TR
Q1
QR9
FROM REEL SERVO
S-REEL PULSE
QR17
IC3
P6008
JOG 1
QR23
QR8
JOG DIAL
T-REEL PULSE
Q18
JOG 2
QR24

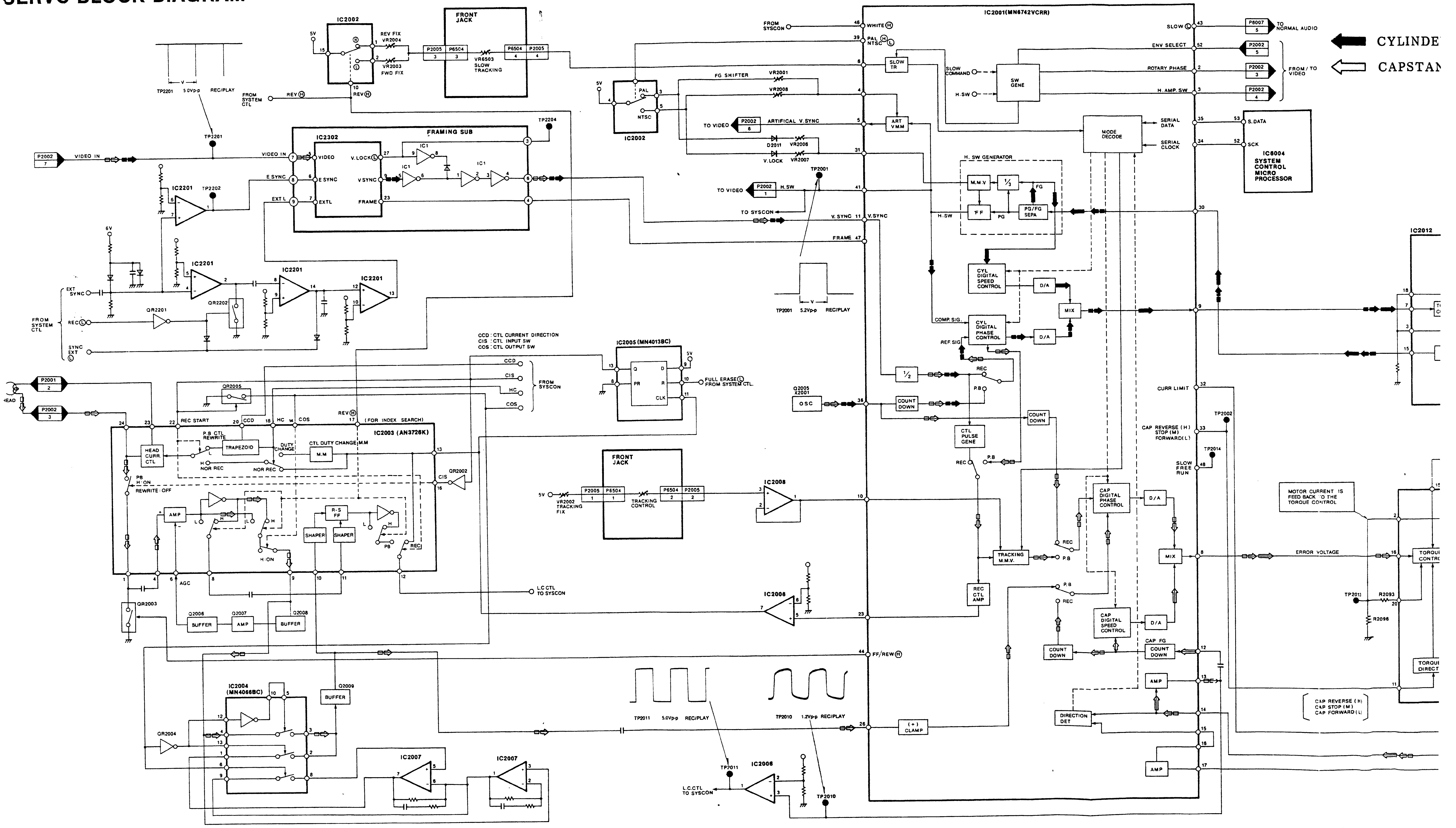
	CONNECTION	CONTENTS
SERVICE	TP6001 · TP6003	INHIBIT AUTO-OFF
TEST	TP6001 · TP6002	ONSCREEN FUNCTION MEMORY INITIALIZE

	P20	P21	P22	P23
P30	PLAY LED	V.S R. LED	CASSETTE LED	CASSETTE LED
P31	FF LED	V.S.R. LED	PAUSE LED	SEARCH LED
P32	REW LED	REV LED	S · PAUSE LED	A · DUB LED
P33	STOP LED	╳	FWD LED	REC LED

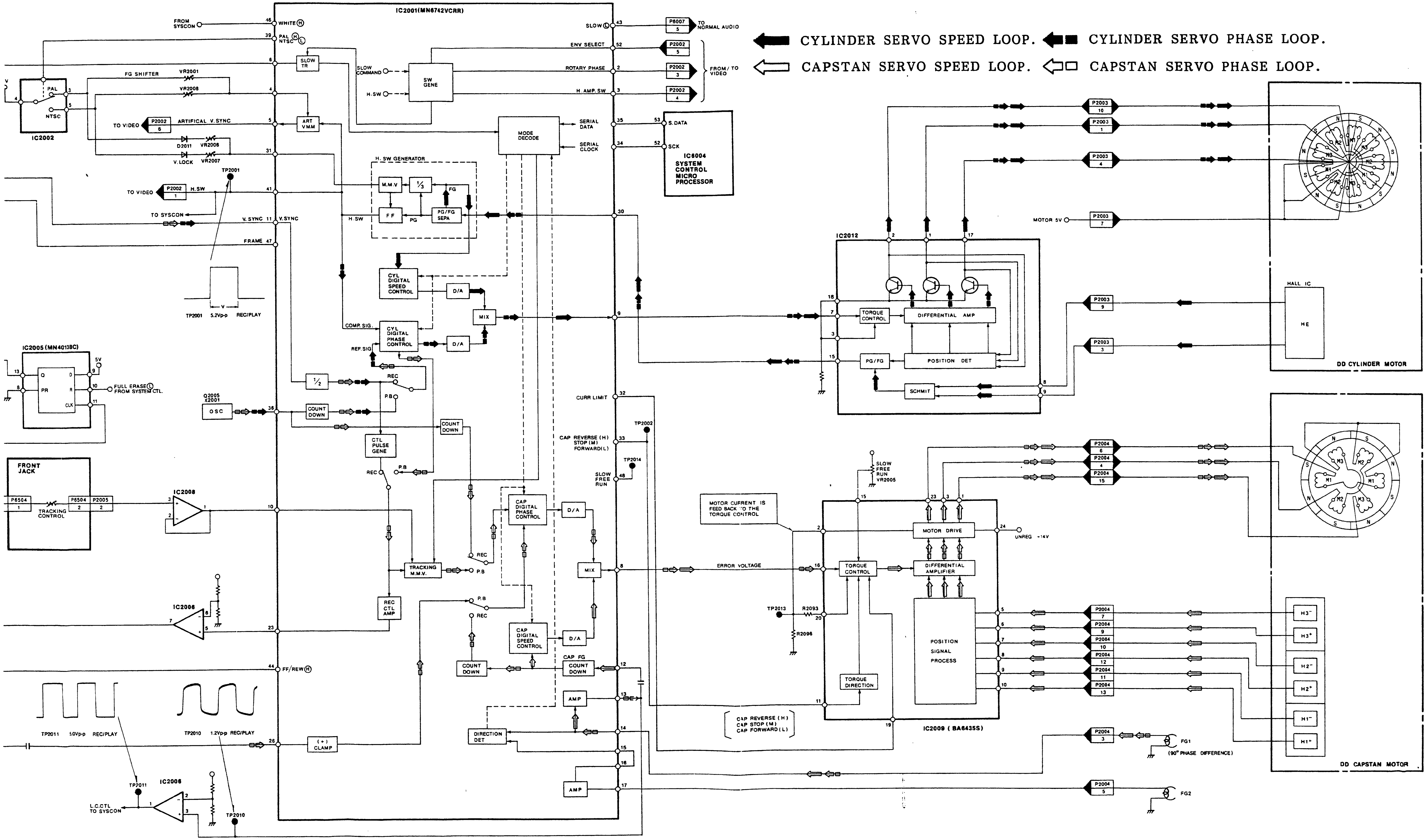
	P10	P11	P12	P13	PBO
P40	STOP KEY	A · DUB KEY	COUNTER RESET	SHIFT KEY	SEARCH DIAL
P41	╳	PAUSE KEY	LAP/REMAIN KEY	MODE KEY	
P42	PLAY KEY	REC KEY	+DATA KEY	DISPLAY KEY	
P43	REW KEY	SEARCH KEY	COUNTER SEARCH KEY	WRITE/ERASE KEY	
P50	FF KEY	╳	DOWN KEY	╳	
P51	PAL	EXT TIMER PLAY	A · DUB CH2	OPERATE REMOTE	╳
P52	M NTSC SELECT	EXT TIMER REC	A · DUB CH1	SENSOR REC ON	╳


IC201
IC202
EAROM
REF. NO. 6000 SERIES
FRONT
SYSTEM CONTROL
CONNECTION
CONTENTS
SERVICE
TP6001 - TP6003
INHIBIT AUTO-OFF
TEST
TP6001 - TP6002
ONSCREEN FUNCTION MEMORY INITIALIZE
SERVICE TP6003
TEST TP6002
TP6001
+5V
UNREG +45V
POWER DOWN DETECTION
IC4
TEST/SVC
POWER DOWN
TO NORMAL AUDIO
FROM SERVO
CAPSTAN FG
TO RS-232C
TO SERVO
TO REEL
DEW SENSOR
CASSETTE SW
SENSOR LED
SUPPLY PHOTO TR
TAKEUP PHOTO TR
SUPPLY PHOTO
TAKEUP PHOTO
FROM REEL SERVO
S-REEL PULSE
T-REEL PULSE
JOG 1
JOG 2
JOG DIAL
SERIAL CLK
SERIAL DATA IN
SERIAL DATA OUT
SERIAL DATA
DEW
CASSETTE SW
PHOTO SENSOR
REEL/JOG
REEL/JOG SELECT
FLYING ERASE ON
SYNC SELECT
TRIC
RELAY
PLAY
REC
REC ST
EE
HI-FI MUTE
HI-FI R/P
FWD/REV
SPCHG
TO VIDEO
TO HI-FI AUDIO
EJECT POSITION
STOP POSITION
STOP 2 POSITION
SAFETY TAB ON
PLAY POSITION
VSR ON
CAMERA PAUSE
SYNC EDIT
EDIT TRG
PREROLL
TENSION NG
REC REMOTE
LOADING MOTOR ON
LOADING MOTOR FWD
M. LOADING
REEL SOLENOID ON
SOLENOID DRIVE
REEL SOLENOID
FROM/TO SERVO
LOADING MOTOR DRIVE CIRCUIT
LOADING MOTOR
IC5
IC6
IC7
IC8
FULL ERASE
EXT CTL
LCD
AUDIO LIMITER
DOLBY NR
TIME CODE
SERVO LOCK
COUNT
VISS
VASS
RENUMBER
REMAIN

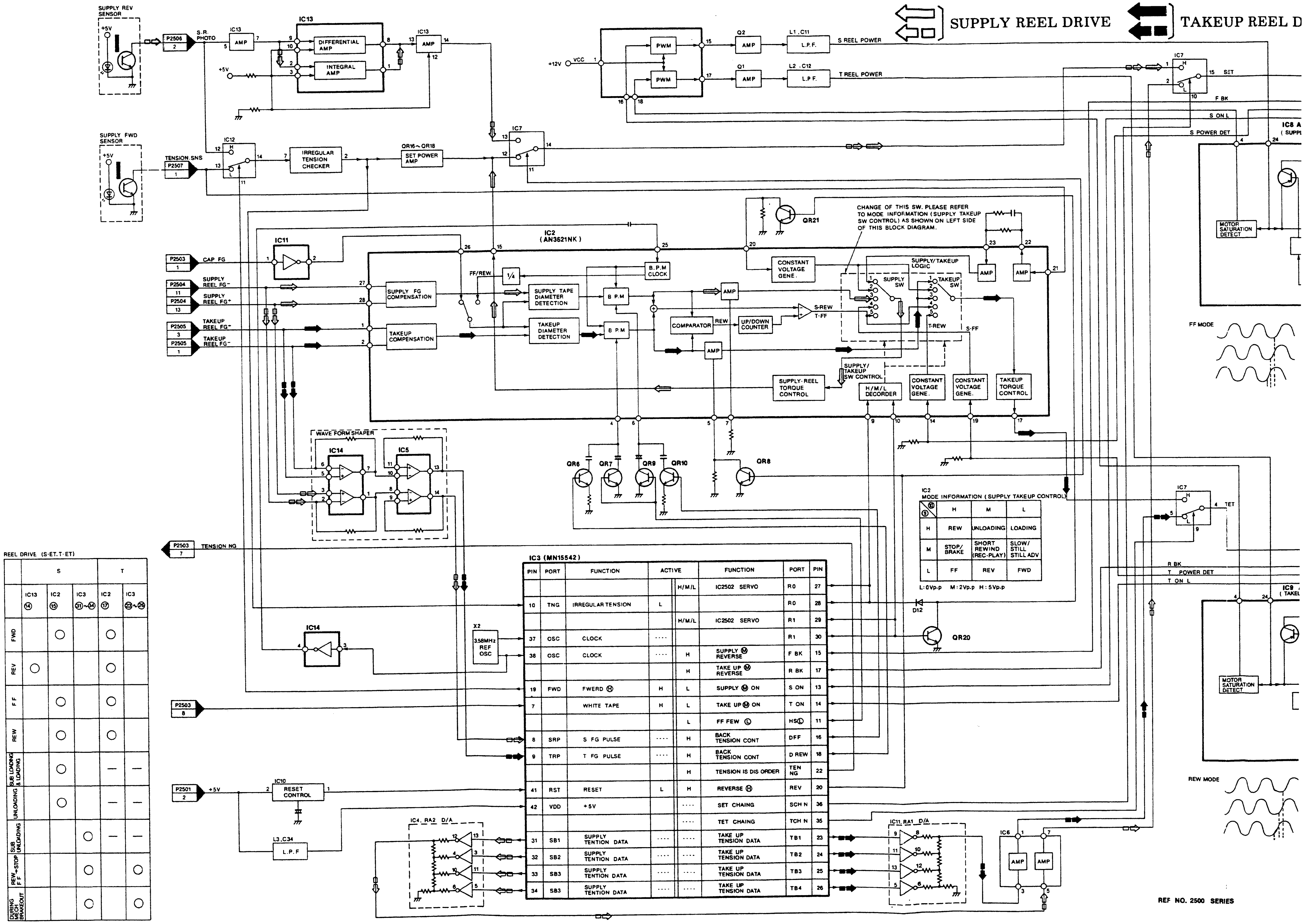
SERVO BLOCK DIAGRAM



CYLINDE
CAPSTAN
IC2001(MN6742VCRR)
IC2002
FRONT JACK
REV FIX VR2004
VR2003 FWD FIX
VR6503 SLOW TRACKING
P2005
P6504
FROM SYSTEM CTL
REV Ⓗ
TP2201 5.0Vp-p REC/PLAY
TP2204
IC2302
FRAMING SUB
VIDEO IN
E SYNC
EXT L
V.LOCK
V.SYNC
FRAME
IC1
P2002
IC2201
TP2202
6V
EXT SYNC
FROM SYSTEM CTL
REC Ⓛ
SYNC EXT Ⓛ
QR2201
QR2202
FROM SYSCON
WHITE Ⓗ
PAL Ⓗ NTSC Ⓛ
PAL
NTSC
5V
FG SHIFTER
VR2001
VR2008
TO VIDEO
ARTIFICAL V.SYNC
D2011
VR2006
VR2007
V.LOCK
TP2001
H.SW
TO SYSCON
TP2001 5.2Vp-p REC/PLAY
SLOW TR
ART VMM
SLOW COMMAND
SW GENE
SLOW Ⓛ
ENV SELECT
ROTARY PHASE
H. AMP. SW
P6007
TO NORMAL AUDIO
FROM / TO VIDEO
MODE DECODE
SERIAL DATA
SERIAL CLOCK
S.DATA
SCK
IC6004 SYSTEM CONTROL MICRO PROCESSOR
H. SW GENERATOR
M.M.V
1/3
FG
FF
PG
PG/FG SEPA
CYL DIGITAL SPEED CONTROL
D/A
MIX
COMP. SIG.
CYL DIGITAL PHASE CONTROL
REF. SIG
1/2
REC
P.B
Q2005 X2001
OSC
COUNT DOWN
CTL PULSE GENE
CURR LIMIT
TP2002
CAP REVERSE (H) STOP (M) FORWARD (L)
TP2014
SLOW FREE RUN
IC2012
CCD : CTL CURRENT DIRECTION
CIS : CTL INPUT SW
COS : CTL OUTPUT SW
IC2005 (MN4013BC)
FULL ERASE Ⓛ FROM SYSTEM CTL
CCD
CIS
HC
COS
P2001
HEAD
QR2005
REC START
(FOR INDEX SEARCH)
IC2003 (AN3726K)
P.B CTL REWRITE
TRAPEZOID
DUTY CHANGE
CTL DUTY CHANGE M.M
M.M
HEAD CURR. CTL
NOR REC
PB H: ON
REWRITE : OFF
AMP
R-S FF
SHAPER
H: ON
QR2002
AGC
L.C CTL TO SYSCON
QR2003
Q2006 BUFFER
Q2007 AMP
Q2008 BUFFER
VR2002 TRACKING FIX
TRACKING CONTROL
IC2008
IC2006
FF/REW Ⓗ
TRACKING M.M.V.
REC CTL AMP
CAP DIGITAL PHASE CONTROL
CAP DIGITAL SPEED CONTROL
CAP FG
MOTOR CURRENT IS FEED BACK TO THE TORQUE CONTROL
ERROR VOLTAGE
TORQUE CONTROL
TORQUE DIRECT
TP2011
R2093
R2096
DIRECTION DET
(+) CLAMP
IC2004 (MN4066BC)
Q2009 BUFFER
QR2004
IC2007
TP2011 5.0Vp-p REC/PLAY
TP2010 1.2Vp-p REC/PLAY
TP2010
L.C.CTL TO SYSCON


CYLINDER SERVO SPEED LOOP.
CYLINDER SERVO PHASE LOOP.
CAPSTAN SERVO SPEED LOOP.
CAPSTAN SERVO PHASE LOOP.
IC2001(MN6742VCRR)
FROM SYSCON
WHITE Ⓗ
PAL Ⓗ NTSC Ⓛ
SLOW TR
SLOW COMMAND
H.SW
SW GENE
SLOW Ⓛ
ENV SELECT
ROTARY PHASE
H. AMP. SW
P6007 5
TO NORMAL AUDIO
P2002 5
P2002 3
P2002 4
FROM/TO VIDEO
IC2002
PAL
NTSC
FG SHIFTER
VR2001
VR2008
TO VIDEO
P2002 6
ARTIFICAL V.SYNC
ART VMM
D2011
VR2006
V.LOCK
VR2007
MODE DECODE
SERIAL DATA
SERIAL CLOCK
S.DATA
SCK
IC6004 SYSTEM CONTROL MICRO PROCESSOR
H. SW GENERATOR
M.M.V
1/3
FG
FF
PG
PG/FG SEPA
TP2001
P2002 1
H.SW
TO SYSCON
V. SYNC
V.SYNC
FRAME
TP2001 5.2Vp-p REC/PLAY
CYL DIGITAL SPEED CONTROL
D/A
MIX
COMP. SIG.
CYL DIGITAL PHASE CONTROL
REF. SIG
1/2
REC
P.B
IC2005 (MN4013BC)
5V
FULL ERASE Ⓛ FROM SYSTEM CTL.
Q2005 X2001
OSC
COUNT DOWN
CTL PULSE GENE
FRONT JACK
P6504
P2005
TRACKING CONTROL
IC2008
TRACKING M.M.V.
CAP DIGITAL PHASE CONTROL
CURR LIMIT
TP2002
CAP REVERSE (H) STOP (M) FORWARD (L)
TP2014
SLOW FREE RUN
IC2006
REC CTL AMP
CAP DIGITAL SPEED CONTROL
CAP FG
FF/REW Ⓗ
AMP
DIRECTION DET
(+) CLAMP
TP2011 5.0Vp-p REC/PLAY
TP2010 1.2Vp-p REC/PLAY
L.C.CTL TO SYSCON
TP2011
TP2010
P2003 10
P2003 1
P2003 4
P2003 7
MOTOR 5V
IC2012
TORQUE CONTROL
DIFFERENTIAL AMP
PG/FG
POSITION DET
SCHMIT
HALL IC
HE
P2003 9
P2003 3
DD CYLINDER MOTOR
MOTOR CURRENT IS FEED BACK TO THE TORQUE CONTROL
SLOW FREE RUN VR2005
MOTOR DRIVE
UNREG -14V
ERROR VOLTAGE
DIFFERENTIAL AMPLIFIER
TP2013
R2093
R2096
POSITION SIGNAL PROCESS
TORQUE DIRECTION
CAP REVERSE (H) CAP STOP (M) CAP FORWARD (L)
IC2009 (BA6435S)
P2004 6
P2004 4
P2004 15
P2004 7
P2004 9
P2004 10
P2004 12
P2004 11
P2004 13
P2004 3
P2004 5
H3⁻
H3⁺
H2⁻
H2⁺
H1⁻
H1⁺
FG1
(90° PHASE DIFFERENCE)
FG2
DD CAPSTAN MOTOR

REEL SERVO BLOCK DIAGRAM


SUPPLY REEL DRIVE
TAKEUP REEL D
SUPPLY REV SENSOR
+5V
P2506 2
S.R. PHOTO
IC13
AMP
DIFFERENTIAL AMP
INTEGRAL AMP
SUPPLY FWD SENSOR
TENSION SNS
P2507 1
IC12
IRREGULAR TENSION CHECKER
QR16~QR18
SET POWER AMP
IC7
+12V
VCC
PWM
Q2
Q1
L1, C11
L2, C12
L.P.F.
S REEL POWER
T REEL POWER
SET
F BK
S ON L
S POWER DET
IC8 A
MOTOR SATURATION DETECT
QR21
IC2 (AN3621NK)
IC11
P2503 1
CAP FG
P2504 11
SUPPLY REEL FG⁻
P2504 13
SUPPLY REEL FG⁺
P2505 3
TAKEUP REEL FG⁻
P2505 1
TAKEUP REEL FG⁻
FF/REW
1/4
SUPPLY FG COMPENSATION
TAKEUP COMPENSATION
SUPPLY TAPE DIAMETER DETECTION
TAKEUP DIAMETER DETECTION
B.P.M CLOCK
B.P.M
AMP
COMPARATOR
REW
UP/DOWN COUNTER
S-REW
T-FF
CONSTANT VOLTAGE GENE.
SUPPLY/TAKEUP LOGIC
SUPPLY SW
TAKEUP SW
T-REW
S-FF
SUPPLY/TAKEUP SW CONTROL
SUPPLY-REEL TORQUE CONTROL
H/M/L DECORDER
TAKEUP TORQUE CONTROL
CHANGE OF THIS SW. PLEASE REFER TO MODE INFORMATION (SUPPLY TAKEUP SW CONTROL) AS SHOWN ON LEFT SIDE OF THIS BLOCK DIAGRAM.
WAVE FORM SHAPER
IC14
IC5
QR6
QR7
QR9
QR10
QR8
FF MODE
REW MODE
P2503 7
TENSION NG
X2
3.58MHz REF OSC
P2503 8
P2501 2
+5V
IC10
RESET CONTROL
L3, C34
L.P.F
IC4, RA2 D/A
IC11, RA1 D/A
IC6
D12
QR20
T POWER DET
T ON L
R BK
TET
IC9 (TAKE
REF NO. 2500 SERIES

IC3 (MN15542)

PIN	PORT	FUNCTION	ACTIVE		FUNCTION	PORT	PIN
				H/M/L	IC2502 SERVO	R0	27
10	TNG	IRREGULAR TENSION	L			R0	28
				H/M/L	IC2502 SERVO	R1	29
37	OSC	CLOCK	....			R1	30
38	OSC	CLOCK	....	H	SUPPLY Ⓜ REVERSE	F BK	15
				H	TAKE UP Ⓜ REVERSE	R BK	17
19	FWD	FWERD Ⓗ	H	L	SUPPLY Ⓜ ON	S ON	13
7		WHITE TAPE	H	L	TAKE UP Ⓜ ON	T ON	14
				L	FF FEW Ⓛ	HSⓁ	11
8	SRP	S FG PULSE	....	H	BACK TENSION CONT	DFF	16
9	TRP	T FG PULSE	....	H	BACK TENSION CONT	D REW	18
				H	TENSION IS DIS ORDER	TEN NG	22
41	RST	RESET	L	H	REVERSE Ⓗ	REV	20
42	VDD	+5V		....	SET CHAING	SCH N	36
				....	TET CHAING	TCH N	35
31	SB1	SUPPLY TENTION DATA	....	....	TAKE UP TENSION DATA	TB1	23
32	SB2	SUPPLY TENTION DATA	....	....	TAKE UP TENSION DATA	TB2	24
33	SB3	SUPPLY TENTION DATA	....	....	TAKE UP TENSION DATA	TB3	25
34	SB3	SUPPLY TENTION DATA	....	....	TAKE UP TENSION DATA	TB4	26

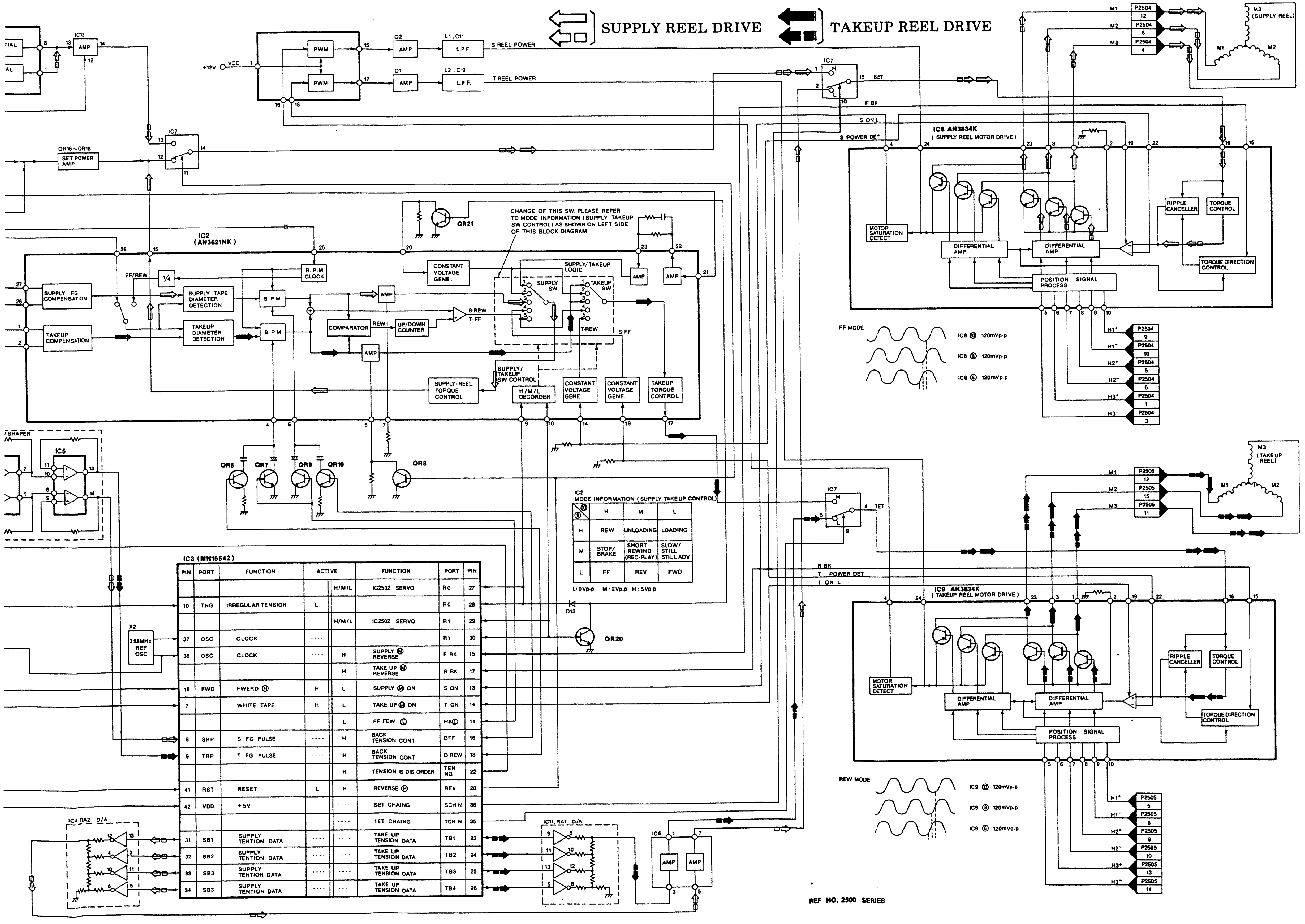
REEL DRIVE (S·ET. T·ET)

	S			T	
	IC13 ⑭	IC2 ⑮	IC3 ㉛~㉞	IC2 ⑰	IC3 ㉓~㉖
FWD		○		○	
REV	○			○	
FF		○		○	
REW		○		○	
SUB LOADING & LOADING		○		—	—
UNLOADING		○		—	—
SUB UNLOADING			○	—	—
REW, FF →STOP			○		○
DURING MECH BRAKEOUT			○		○

IC2
MODE INFORMATION (SUPPLY TAKEUP CONTROL)

⑨ \ ⑩	H	M	L
H	REW	UNLOADING	LOADING
M	STOP/ BRAKE	SHORT REWIND (REC·PLAY)	SLOW/ STILL STILL ADV
L	FF	REV	FWD

L: 0Vp-p M: 2Vp.p H: 5Vp.p


SUPPLY REEL DRIVE
TAKEUP REEL DRIVE
IC13
AMP
+12V
VCC
PWM
PWM
Q2
AMP
Q1
AMP
L1 , C11
L.P.F.
L2 , C12
L.P.F.
S REEL POWER
T REEL POWER
IC7
QR16～QR18
SET POWER AMP
IC2
(AN3621NK)
QR21
CHANGE OF THIS SW. PLEASE REFER TO MODE INFORMATION (SUPPLY TAKEUP SW CONTROL) AS SHOWN ON LEFT SIDE OF THIS BLOCK DIAGRAM
FF/REW
1/4
B. P. M CLOCK
SUPPLY FG COMPENSATION
SUPPLY TAPE DIAMETER DETECTION
TAKEUP COMPENSATION
TAKEUP DIAMETER DETECTION
B P M
B P M
AMP
COMPARATOR
REW
UP/DOWN COUNTER
S-REW
T-FF
AMP
CONSTANT VOLTAGE GENE.
SUPPLY/TAKEUP LOGIC
SUPPLY SW
TAKEUP SW
T-REW
S-FF
AMP
AMP
SUPPLY/ TAKEUP SW CONTROL
SUPPLY-REEL TORQUE CONTROL
H/M/L DECORDER
CONSTANT VOLTAGE GENE.
CONSTANT VOLTAGE GENE.
TAKEUP TORQUE CONTROL
SHAPER
IC5
QR6
QR7
QR9
QR10
QR8
X2
3.58MHz REF OSC
D12
QR20
IC4, RA2 D/A
IC11, RA1 D/A
IC6
AMP
AMP
SET
F BK
S ON L
S POWER DET
IC8 AN3834K
(SUPPLY REEL MOTOR DRIVE)
MOTOR SATURATION DETECT
DIFFERENTIAL AMP
DIFFERENTIAL AMP
RIPPLE CANCELLER
TORQUE CONTROL
TORQUE DIRECTION CONTROL
POSITION SIGNAL PROCESS
M1
M2
M3
P2504
M3 (SUPPLY REEL)
FF MODE
IC8 ⑩ 120mVp-p
IC8 ⑧ 120mVp-p
IC8 ⑥ 120mVp-p
H1⁺
H1⁻
H2⁺
H2⁻
H3⁺
H3⁻
M3 (TAKEUP REEL)
P2505
TET
R BK
T POWER DET
T ON L
IC9 AN3834K
(TAKEUP REEL MOTOR DRIVE)
REW MODE
IC9 ⑩ 120mVp-p
IC9 ⑧ 120mVp-p
IC9 ⑥ 120mVp-p
REF NO. 2500 SERIES

IC3 (MN15542)

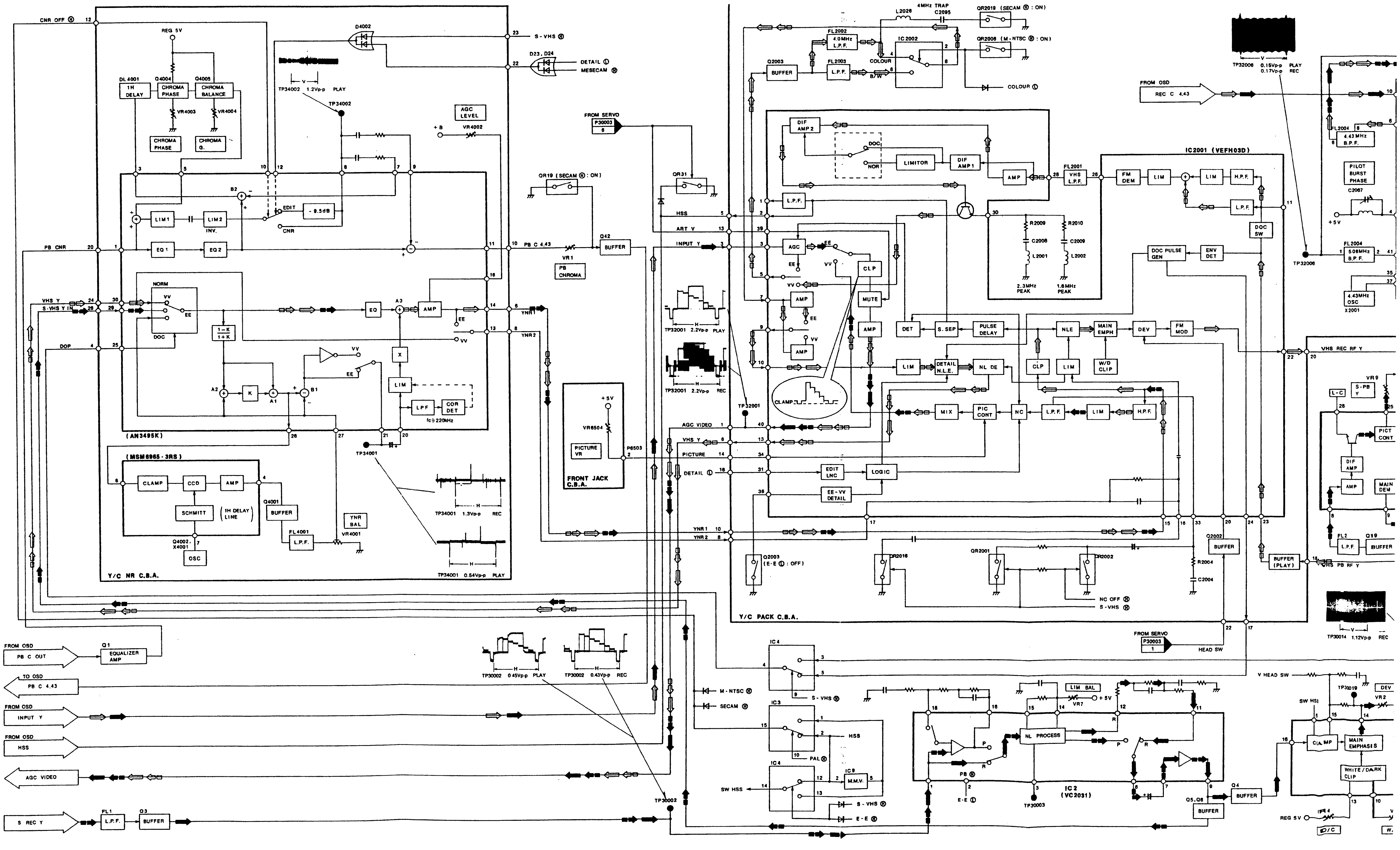
PIN	PORT	FUNCTION	ACTIVE		FUNCTION	PORT	PIN
				H/M/L	IC2502 SERVO	R0	27
10	TNG	IRREGULAR TENSION	L			R0	28
				H/M/L	IC2502 SERVO	R1	29
37	OSC	CLOCK	....			R1	30
38	OSC	CLOCK	....	H	SUPPLY Ⓜ REVERSE	F BK	15
				H	TAKE UP Ⓜ REVERSE	R BK	17
19	FWD	FWERD Ⓗ	H	L	SUPPLY Ⓜ ON	S ON	13
7		WHITE TAPE	H	L	TAKE UP Ⓜ ON	T ON	14
				L	FF FEW Ⓛ	HSⓁ	11
8	SRP	S FG PULSE	....	H	BACK TENSION CONT	DFF	16
9	TRP	T FG PULSE	....	H	BACK TENSION CONT	D REW	18
				H	TENSION IS DIS ORDER	TEN NG	22
41	RST	RESET	L	H	REVERSE Ⓗ	REV	20
42	VDD	+5V		....	SET CHAING	SCH N	36
				....	TET CHAING	TCH N	35
31	SB1	SUPPLY TENTION DATA	....	....	TAKE UP TENSION DATA	TB1	23
32	SB2	SUPPLY TENTION DATA	....	....	TAKE UP TENSION DATA	TB2	24
33	SB3	SUPPLY TENTION DATA	....	....	TAKE UP TENSION DATA	TB3	25
34	SB3	SUPPLY TENTION DATA	....	....	TAKE UP TENSION DATA	TB4	26

IC2
MODE INFORMATION (SUPPLY TAKEUP CONTROL)

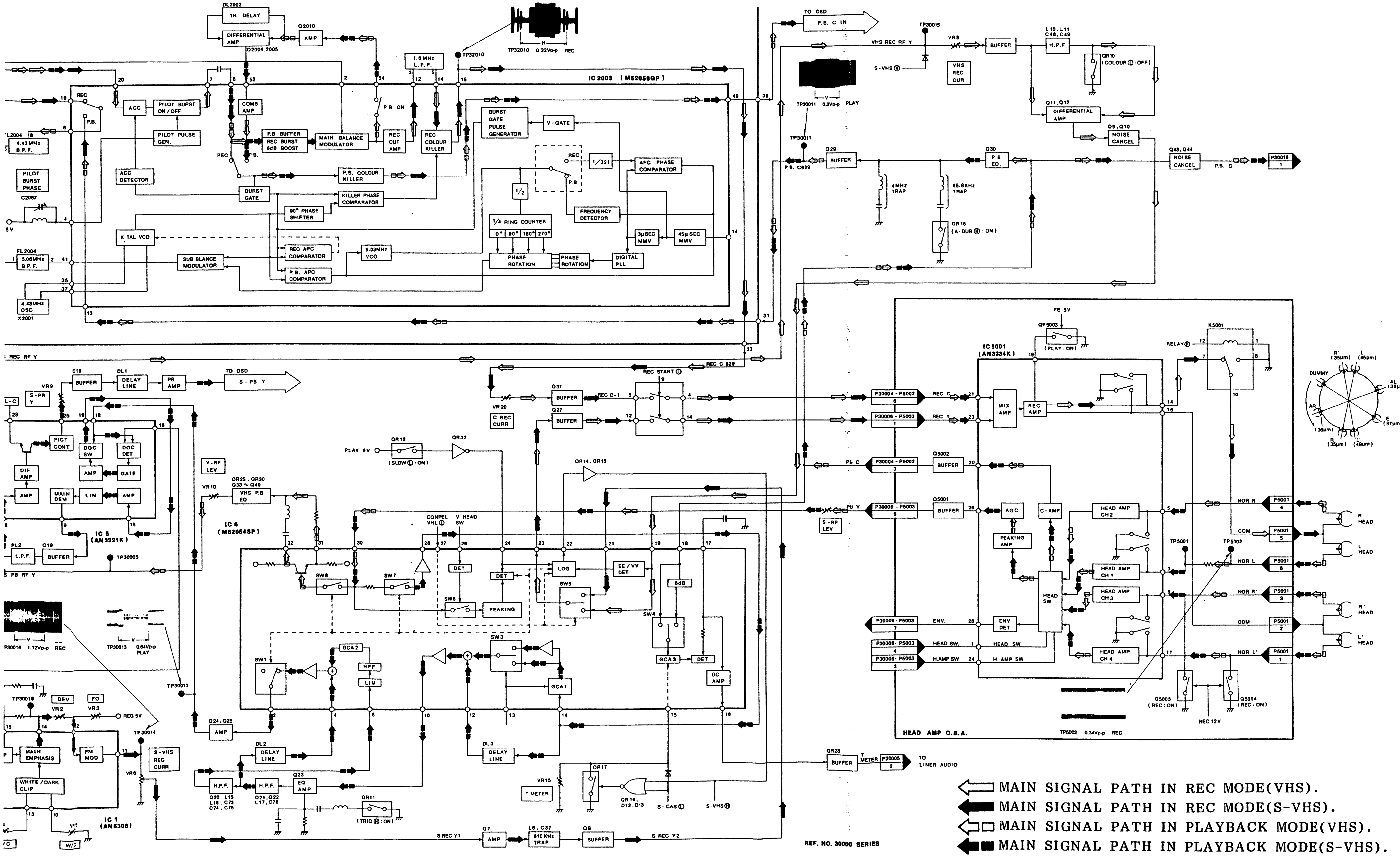
⑨ \ ⑩	H	M	L
H	REW	UNLOADING	LOADING
M	STOP/ BRAKE	SHORT REWIND (REC-PLAY)	SLOW/ STILL STILL ADV
L	FF	REV	FWD

L:0Vp-p M:2Vp-p H:5Vp-p

VIDEO (MAIN) BLOCK DIAGRAM



CNR OFF Ⓗ
REG 5V
DL4001
1H DELAY
Q4004
CHROMA PHASE
Q4005
CHROMA BALANCE
VR4003
VR4004
CHROMA PHASE
CHROMA G.
D4002
S-VHS Ⓗ
D23, D24
DETAIL Ⓛ
MESECAM Ⓗ
TP34002 1.2Vp-p PLAY
TP34002
AGC LEVEL
+B
VR4002
FROM SERVO
P30003
LIM1
LIM2
INV.
EDIT
-9.5dB
CNR
B2
PB CNR
EQ1
EQ2
PB C 4.43
VR1
PB CHROMA
Q42
BUFFER
QR19 (SECAM Ⓗ : ON)
QR31
NORM
VV
EE
DOC
VHS Y
S-VHS Y IN
DOP
1-K
1+K
EQ
A3
AMP
YNR1
YNR2
X
LIM
LPF
COR DET
fc≒220kHz
A2
K
A1
B1
(AN3495K)
TP34001
(MSM6965-3RS)
CLAMP
CCD
AMP
SCHMITT
(1H DELAY LINE)
Q4001
BUFFER
FL4001
L.P.F.
YNR BAL
VR4001
Q4002, X4001
OSC
TP34001 1.3Vp-p REC
TP34001 0.54Vp-p PLAY
Y/C NR C.B.A.
+5V
VR6504
PICTURE VR
P6503
FRONT JACK C.B.A.
HSS
ART V
INPUT Y
TP32001 2.2Vp-p PLAY
TP32001 2.2Vp-p REC
TP32001
AGC VIDEO
VHS Y
PICTURE
DETAIL Ⓛ
YNR1
YNR2
L2026
4MHz TRAP
C2095
QR2019 (SECAM Ⓗ : ON)
QR2006 (M-NTSC Ⓗ : ON)
FL2002
4.0MHz L.P.F.
IC2002
COLOUR
Q2003
BUFFER
FL2003
L.P.F.
B/W
COLOUR Ⓛ
DIF AMP2
DOC
NOR
LIMITOR
DIF AMP1
AMP
FL2001
VHS L.P.F.
L.P.F.
AGC
CLP
MUTE
R2009
R2010
C2008
C2009
L2001
L2002
2.3MHz PEAK
1.8MHz PEAK
DET
S. SEP
PULSE DELAY
LIM
DETAIL N.L.E.
NL DE
CLAMP
MIX
PIC CONT
NC
L.P.F.
H.P.F.
EDIT LNC
LOGIC
EE-VV DETAIL
IC2001 (VEFH03D)
FM DEM
DOC SW
DOC PULSE GEN
ENV DET
NLE
MAIN EMPH
DEV
FM MOD
CLP
W/D CLIP
Q2003 (E-E Ⓛ : OFF)
QR2016
QR2001
QR2002
R2004
C2004
Q2002
BUFFER
NC OFF Ⓗ
S-VHS Ⓗ
Y/C PACK C.B.A.
TP32006 0.15Vp-p PLAY 0.17Vp-p REC
FROM OSD
REC C 4.43
FL2004
4.43MHz B.P.F.
PILOT BURST PHASE
C2067
+5V
FL2004
5.06MHz B.P.F.
TP32006
4.43MHz OSC
X2001
VHS REC RF Y
VR9
S-PB Y
L-C
PICT CONT
DIF AMP
AMP
MAIN DEM
FL2
L.P.F.
Q19
BUFFER
BUFFER (PLAY)
VHS PB RF Y
TP30014 1.12Vp-p REC
FROM SERVO
P30003
HEAD SW
FROM OSD
PB C OUT
Q1
EQUALIZER AMP
TO OSD
PB C 4.43
FROM OSD
INPUT Y
FROM OSD
HSS
AGC VIDEO
S REC Y
FL1
L.P.F.
Q3
BUFFER
TP30002 0.45Vp-p PLAY
TP30002 0.43Vp-p REC
TP30002
IC4
M-NTSC Ⓗ
SECAM Ⓗ
S-VHS Ⓗ
IC3
HSS
PAL Ⓗ
IC9
M.M.V.
IC4
SW HSS
S-VHS Ⓗ
E-E Ⓗ
LIM BAL
VR7
+5V
NL PROCESS
PB Ⓗ
E-E Ⓛ
TP30003
IC2 (VC2031)
Q5, Q6
BUFFER
Q4
BUFFER
V HEAD SW
TP30019
DEV
VR2
SW HSS
CLAMP
MAIN EMPHASIS
WHITE/DARK CLIP
REG 5V
D/C


DL2002
1H DELAY
DIFFERENTIAL AMP
Q2010
AMP
Q2004, 2005
TP32010
TP32010 0.32Vp-p REC
1.6 MHz L.P.F.
IC 2003 (M52056GP)
PILOT BURST ON / OFF
PILOT PULSE GEN.
ACC
ACC DETECTOR
COMB AMP
P.B. BUFFER
REC BURST 6dB BOOST
MAIN BALANCE MODULATOR
REC OUT AMP
REC COLOUR KILLER
P.B. ON
BURST GATE PULSE GENERATOR
V-GATE
P.B. COLOUR KILLER
BURST GATE
KILLER PHASE COMPARATOR
90° PHASE SHIFTER
1/321
AFC PHASE COMPARATOR
FREQUENCY DETECTOR
1/4 RING COUNTER
0° 90° 180° 270°
X TAL VCO
REC APC COMPARATOR
5.03MHz VCO
P.B. APC COMPARATOR
SUB BLANCE MODULATOR
PHASE ROTATION
DIGITAL PLL
3μ SEC MMV
45μ SEC MMV
FL2004
4.43MHz B.P.F.
PILOT BURST PHASE
C2067
5.06MHz B.P.F.
4.43MHz OSC
X2001
REC
P.B.
TO OSD
P.B. C IN
VHS REC RF Y
TP30015
VR8
BUFFER
L10, L11 C48, C49
H.P.F.
QR10 (COLOUR Ⓛ:OFF)
S-VHS Ⓗ
VHS REC CUR
TP30011 0.3Vp-p PLAY
Q11, Q12
DIFFERENTIAL AMP
Q9, Q10
NOISE CANCEL
Q29
BUFFER
P.B. C629
Q30
P.B EQ.
Q43, Q44
NOISE CANCEL
P.B. C
P30018
4MHz TRAP
65.8KHz TRAP
QR18 (A-DUB Ⓗ : ON)
REC RF Y
Q18
BUFFER
DL1
DELAY LINE
PB AMP
TO OSD
S-PB Y
VR9
S-PB Y
PICT CONT
DOC SW
DOC DET
AMP
GATE
DIF AMP
MAIN DEM
LIM
IC 5 (AN3321K)
TP30005
FL2
L.P.F.
Q19
BUFFER
S PB RF Y
REC START Ⓛ
REC C 629
Q31
BUFFER
REC C-1
VR 20
C REC CURR
Q27
BUFFER
PLAY 5V
QR12
(SLOW Ⓛ : ON)
QR32
V-RF LEV
QR25, QR30 Q33 ~ Q40
VR10
VHS P.B. EQ
QR14, QR15
IC 6 (M52054SP)
CONPEL VHL Ⓛ
V HEAD SW
SW8
SW7
DET
DET
LOG
EE / VV DET
SW6
PEAKING
SW5
6dB
SW4
GCA 3
DET
DC AMP
SW3
GCA 1
SW1
GCA 2
HPF
LIM
P30014 1.12Vp-p REC
TP30013 0.64Vp-p PLAY
TP30013
TP30019
DEV
FO
VR2
VR3
REG 5V
TP30014
MAIN EMPHASIS
FM MOD
S-VHS REC CURR
VR6
WHITE / DARK CLIP
IC 1 (AN6306)
Q24, Q25
AMP
DL2
DELAY LINE
H.P.F.
Q20, L15 L16, C73 C74, C75
H.P.F.
Q21, Q22 L17, C76
Q23
EQ AMP
QR11
(TRIC Ⓗ : ON)
DL3
DELAY LINE
VR15
T.METER
QR17
QR16, D12, D13
S-CAS Ⓛ
S-VHS Ⓗ
S REC Y1
Q7
AMP
L6, C37
610KHz TRAP
Q8
BUFFER
S REC Y2
QR28
BUFFER
T METER
P30005
TO LINER AUDIO
S-RF LEV
PB 5V
QR5003
(PLAY : ON)
K5001
RELAY Ⓗ
IC 5001 (AN3334K)
P30004 - P5002
REC C
P30006 - P5003
REC Y
MIX AMP
REC AMP
PB C
Q5002
BUFFER
PB Y
Q5001
BUFFER
AGC
C-AMP
PEAKING AMP
HEAD AMP CH 2
HEAD AMP CH 1
HEAD AMP CH 3
HEAD AMP CH 4
HEAD SW
ENV.
ENV DET
HEAD SW.
H.AMP SW
H. AMP SW
TP5001
TP5002
NOR R
COM
NOR L
NOR R'
NOR L'
P5001
R HEAD
L HEAD
R' HEAD
L' HEAD
DUMMY
R' (35μm)
L (45μm)
AL (38μm)
AR
E (97μm)
(38μm)
R (35μm)
L' (49μm)
Q5003 (REC : ON)
Q5004 (REC : ON)
REC 12V
HEAD AMP C.B.A.
TP5002 0.34Vp-p REC

⇦ MAIN SIGNAL PATH IN REC MODE(VHS).

⬅ MAIN SIGNAL PATH IN REC MODE(S-VHS).

⇦□ MAIN SIGNAL PATH IN PLAYBACK MODE(VHS).

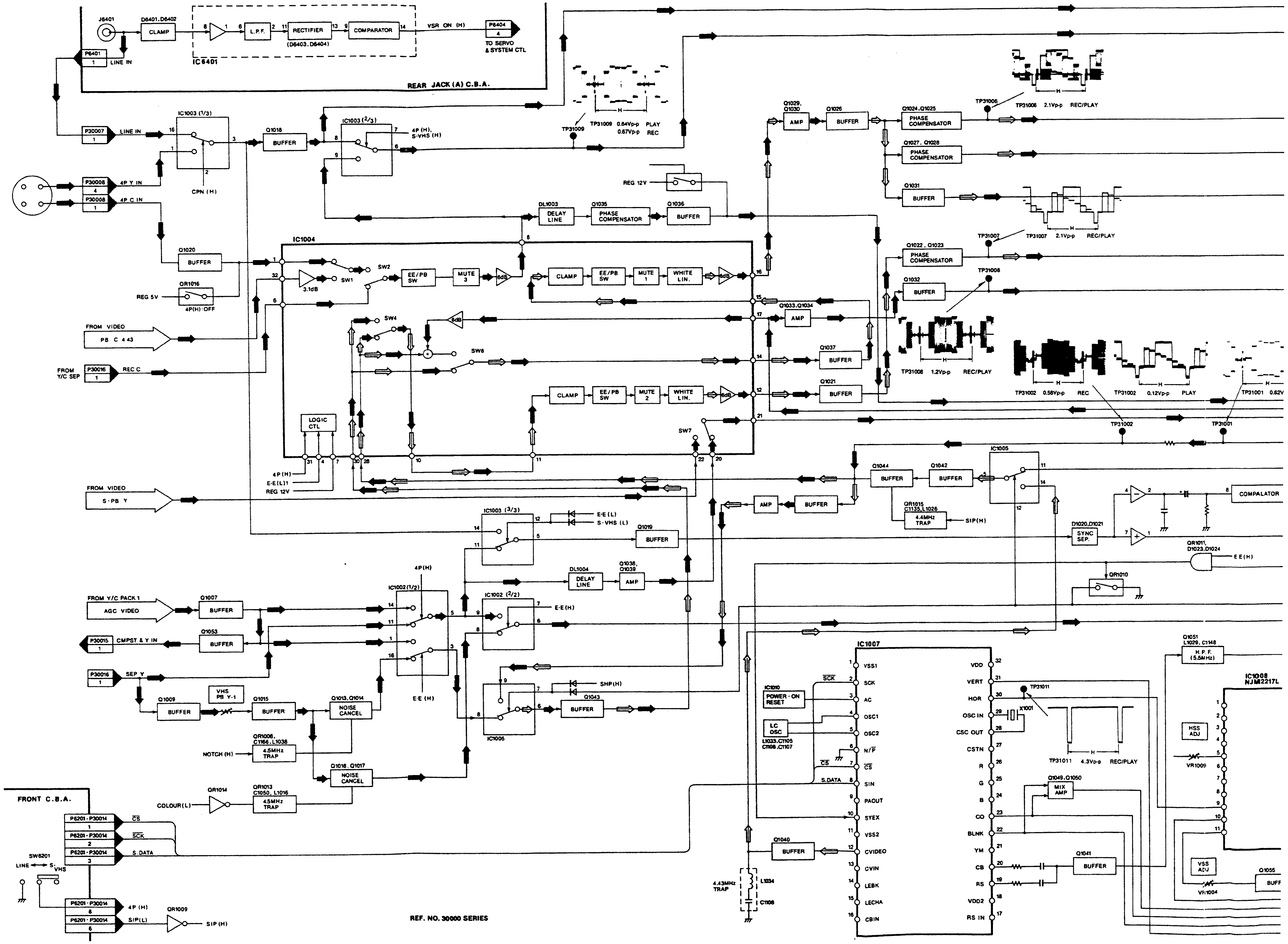
⬅■ MAIN SIGNAL PATH IN PLAYBACK MODE(S-VHS).

REF. NO. 30000 SERIES

VIDEO (OSD) BLOCK DIAGRAM

VIDEO SIGNAL

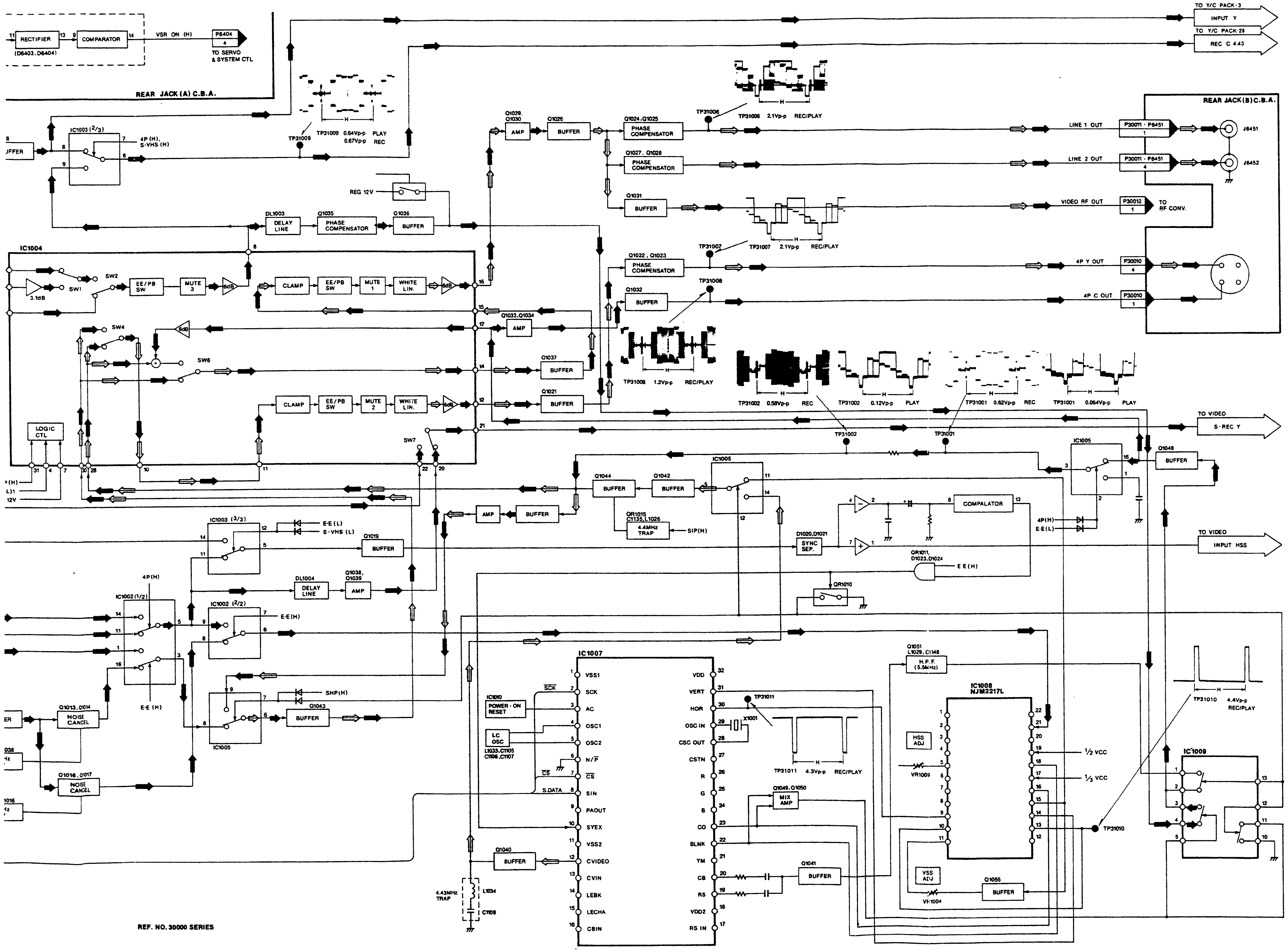
OSD SIGNAL


J6401
D6401, D6402
CLAMP
L.P.F.
RECTIFIER
(D6403, D6404)
COMPARATOR
VSR ON (H)
P6404
TO SERVO & SYSTEM CTL
P6401
LINE IN
IC6401
REAR JACK (A) C.B.A.
IC1003 (1/3)
P30007
CPN (H)
Q1018
BUFFER
IC1003 (2/3)
4P (H), S-VHS (H)
P30008
4P Y IN
4P C IN
TP31009
TP31009 0.64Vp-p PLAY 0.67Vp-p REC
REG 12V
DL1003
DELAY LINE
Q1035
PHASE COMPENSATOR
Q1036
Q1020
IC1004
QR1016
REG 5V
4P(H) OFF
SW1
SW2
3.1dB
EE/PB SW
MUTE 3
6dB
CLAMP
MUTE 1
WHITE LIN.
MUTE 2
SW4
SW6
SW7
LOGIC CTL
4P (H)
E-E (L) 1
FROM VIDEO PB C 4.43
FROM Y/C SEP
P30016
REC C
FROM VIDEO S-PB Y
Q1029, Q1030
AMP
Q1026
Q1024, Q1025
Q1027, Q1028
Q1031
TP31006
TP31006 2.1Vp-p REC/PLAY
TP31007
TP31007 2.1Vp-p REC/PLAY
Q1022, Q1023
Q1032
TP31008
Q1033, Q1034
Q1037
Q1021
TP31008 1.2Vp-p REC/PLAY
TP31002 0.58Vp-p REC
TP31002 0.12Vp-p PLAY
TP31001 0.62V
TP31002
TP31001
IC1005
Q1044
Q1042
QR1015 C1135, L1026
4.4MHz TRAP
SIP (H)
COMPALATOR
D1020, D1021
SYNC SEP.
QR1011, D1023, D1024
E-E (H)
QR1010
IC1003 (3/3)
E-E (L)
S-VHS (L)
Q1019
DL1004
Q1038, Q1039
IC1002 (1/2)
IC1002 (2/2)
FROM Y/C PACK 1 AGC VIDEO
Q1007
Q1053
P30015
CMPST & Y IN
SEP Y
VHS PB Y-1
Q1009
Q1015
Q1013, Q1014
NOISE CANCEL
QR1006, C1166, L1036
4.5MHz TRAP
NOTCH (H)
Q1016, Q1017
SHP (H)
Q1043
IC1005
QR1014
QR1013 C1050, L1016
COLOUR (L)
FRONT C.B.A.
P6201-P30014
CS
SCK
S.DATA
SW6201
LINE ↔ S-VHS
SIP (L)
QR1009
SIP (H)
REF. NO. 30000 SERIES
IC1007
IC1010
POWER-ON RESET
LC OSC
L1033, C1105 C1106, C1107
VSS1
SCK
AC
OSC1
OSC2
N/P
CS
SIN
PACOUT
SYEX
VSS2
CVIDEO
CVIN
LEBK
LECHA
CBIN
VDD
VERT
HOR
OSC IN
CSC OUT
CSTN
R
G
B
CO
BLNK
YM
CB
RS
VDD2
RS IN
TP31011
X1001
TP31011 4.3Vp-p REC/PLAY
Q1049, Q1050
MIX AMP
Q1040
4.43MHz TRAP
L1034
C1108
Q1041
Q1051 L1029, C1148
H.P.F. (5.5MHz)
IC1008 NJM2217L
HSS ADJ
VR1009
VSS ADJ
VR1004
Q1055

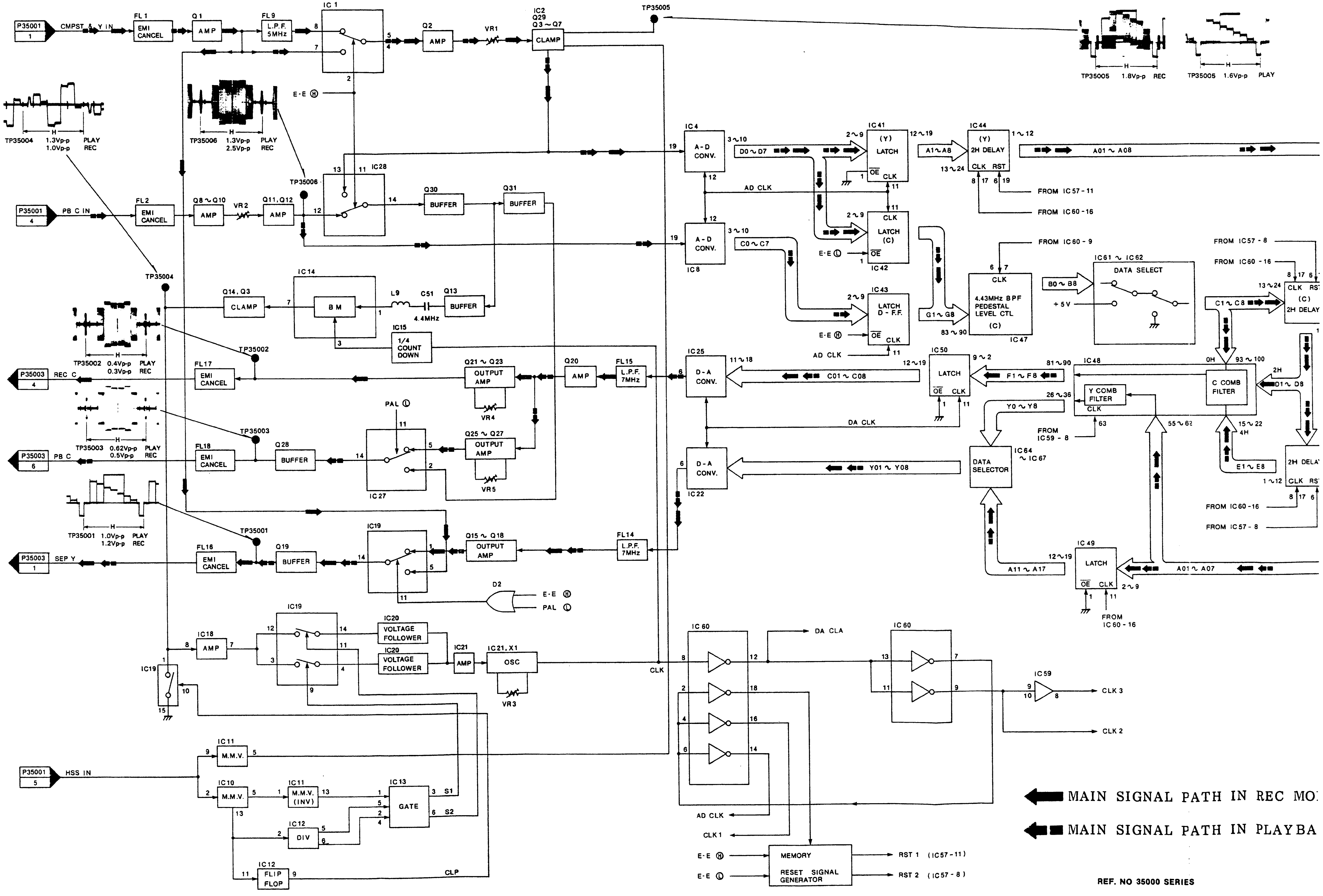
.GRAM

VIDEO SIGNAL

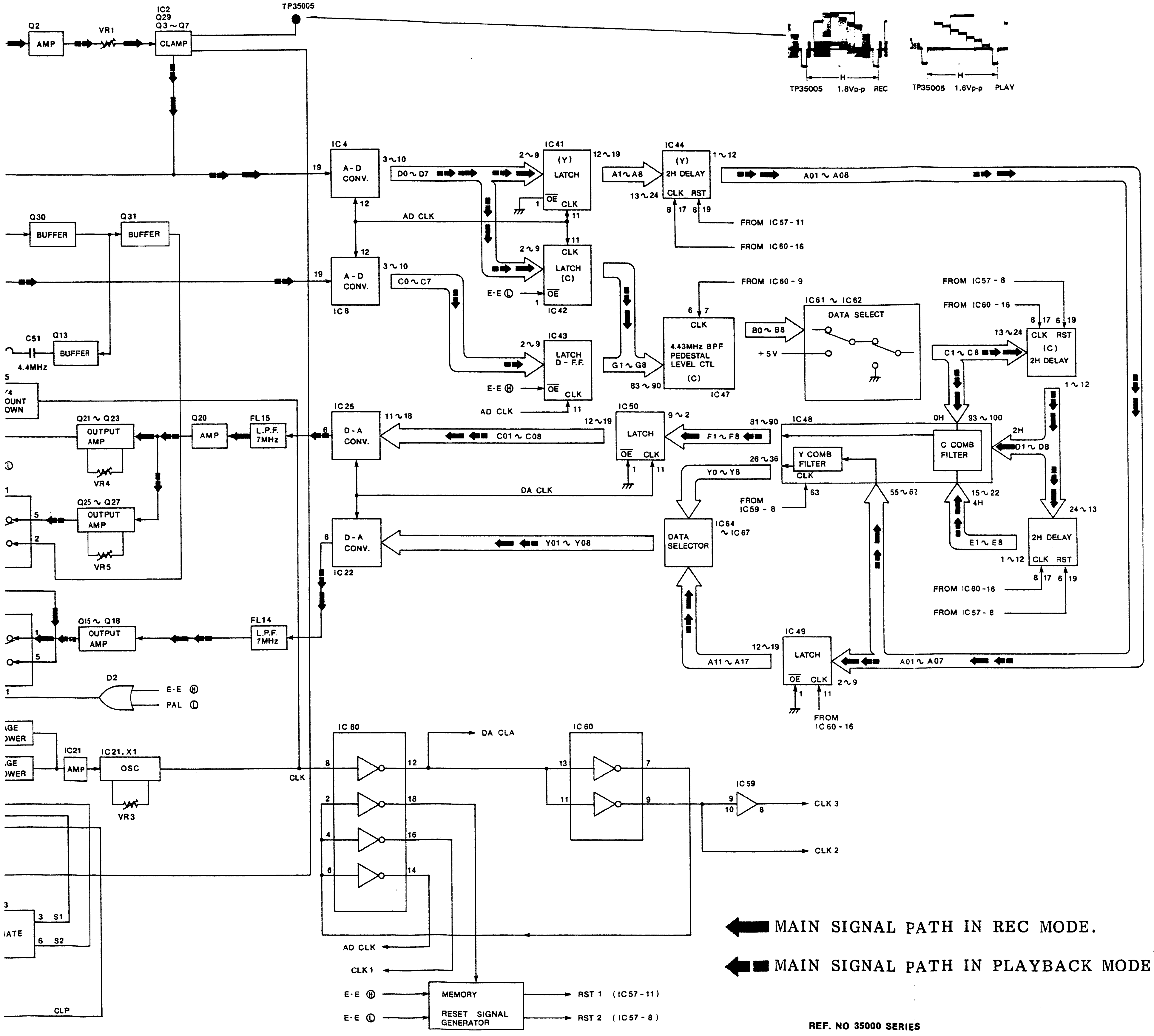
OSD SIGNAL


RECTIFIER
(D6403, D6404)
COMPARATOR
VSR ON (H)
P6404
TO SERVO & SYSTEM CTL
REAR JACK (A) C.B.A.
TO Y/C PACK-3
INPUT Y
TO Y/C PACK-28
REC C 4.43
IC1003 (2/3)
4P (H), S-VHS (H)
TP31009 0.64Vp-p PLAY
0.67Vp-p REC
Q1029, Q1030
AMP
Q1026
BUFFER
Q1024, Q1025
PHASE COMPENSATOR
Q1027, Q1028
PHASE COMPENSATOR
Q1031
BUFFER
TP31006 2.1Vp-p REC/PLAY
REAR JACK (B) C.B.A.
LINE 1 OUT
LINE 2 OUT
P30011 - P6451
J6451
J6452
VIDEO RF OUT
P30012
TO RF CONV.
REG 12V
DL1003
DELAY LINE
Q1035
PHASE COMPENSATOR
Q1036
BUFFER
IC1004
SW1
SW2
EE/PB SW
MUTE 3
6dB
CLAMP
EE/PB SW
MUTE 1
WHITE LIN.
3.1dB
Q1022, Q1023
PHASE COMPENSATOR
TP31007 2.1Vp-p REC/PLAY
Q1032
BUFFER
TP31008
4P Y OUT
4P C OUT
P30010
Q1033, Q1034
AMP
SW4
SW6
Q1037
BUFFER
Q1021
BUFFER
TP31008 1.2Vp-p REC/PLAY
TP31002 0.58Vp-p REC
TP31002 0.12Vp-p PLAY
TP31001 0.62Vp-p REC
TP31001 0.064Vp-p PLAY
CLAMP
EE/PB SW
MUTE 2
WHITE LIN.
LOGIC CTL
SW7
TO VIDEO
S-REC Y
TP31002
TP31001
IC1005
Q1048
BUFFER
IC1005
Q1044
BUFFER
Q1042
BUFFER
QR1015 C1135, L1026
4.4MHz TRAP
SIP(H)
AMP
BUFFER
COMPALATOR
4P(H)
E-E(L)
IC1003 (3/3)
E-E (L)
S-VHS (L)
Q1019
BUFFER
D1020, D1021
SYNC SEP.
TO VIDEO
INPUT HSS
QR1011, D1023, D1024
E E (H)
QR1010
4P(H)
IC1002 (1/2)
DL1004
DELAY LINE
Q1038, Q1039
AMP
IC1002 (2/2)
E-E (H)
IC1003
SHP(H)
Q1043
BUFFER
E-E (H)
IC1005
Q1013, Q1014
NOISE CANCEL
Q1016, Q1017
NOISE CANCEL
IC1007
VSS1
SCK
AC
OSC1
OSC2
N/P
CS
SIN
PAOUT
SYEX
VSS2
CVIDEO
CVIN
LEBK
LECHA
CBIN
VDD
VERT
HOR
OSC IN
CSC OUT
CSTN
R
G
B
CO
BLNK
YM
CB
RS
VDD2
RS IN
IC1010
POWER-ON RESET
LC OSC
L1033, C1105 C1106, C1107
S.DATA
TP31011
X1001
TP31011 4.3Vp-p REC/PLAY
Q1049, Q1050
MIX AMP
Q1040
BUFFER
4.43MHz TRAP
L1034
C1108
Q1041
BUFFER
Q1051 L1029, C1148
H.P.F. (5.5MHz)
IC1008 NJM2217L
HSS ADJ
VR1009
½ VCC
⅓ VCC
VSS ADJ
VR1004
Q1055
BUFFER
TP31010
TP31010 4.4Vp-p REC/PLAY
IC1009
REF. NO. 30000 SERIES

Y/C SEPARATION BLOCK DIAGRAM


P35001 1
CMPST & Y IN
FL1 EMI CANCEL
Q1 AMP
FL9 L.P.F. 5MHz
IC1
E-E Ⓗ
Q2 AMP
VR1
IC2 Q29 Q3 ~ Q7 CLAMP
TP35005
TP35005 1.8Vp-p REC
TP35005 1.6Vp-p PLAY
TP35004 1.3Vp-p PLAY 1.0Vp-p REC
TP35006 1.3Vp-p PLAY 2.5Vp-p REC
TP35006
IC28
Q30 BUFFER
Q31 BUFFER
P35001 4
PB C IN
FL2 EMI CANCEL
Q8 ~ Q10 AMP
VR2
Q11, Q12 AMP
TP35004
IC14 BM
Q14, Q3 CLAMP
L9 C51 4.4MHz
Q13 BUFFER
IC15 1/4 COUNT DOWN
TP35002 0.4Vp-p PLAY 0.3Vp-p REC
TP35002
P35003 4
REC C
FL17 EMI CANCEL
Q21 ~ Q23 OUTPUT AMP
VR4
Q20 AMP
FL15 L.P.F. 7MHz
PAL Ⓛ
TP35003 0.62Vp-p PLAY 0.5Vp-p REC
TP35003
P35003 6
PB C
FL18 EMI CANCEL
Q28 BUFFER
IC27
Q25 ~ Q27 OUTPUT AMP
VR5
TP35001 1.0Vp-p PLAY 1.2Vp-p REC
TP35001
P35003 1
SEP Y
FL16 EMI CANCEL
Q19 BUFFER
IC19
Q15 ~ Q18 OUTPUT AMP
FL14 L.P.F. 7MHz
D2
E-E Ⓗ
PAL Ⓛ
IC18 AMP
IC19
IC20 VOLTAGE FOLLOWER
IC20 VOLTAGE FOLLOWER
IC21 AMP
IC21, X1 OSC
VR3
CLK
P35001 5
HSS IN
IC11 M.M.V.
IC10 M.M.V.
IC11 M.M.V. (INV)
IC12 DIV
IC13 GATE
S1
S2
IC12 FLIP FLOP
CLP
IC4 A-D CONV.
IC8 A-D CONV.
D0 ~ D7
C0 ~ C7
AD CLK
IC41 (Y) LATCH
IC42 LATCH (C)
IC43 LATCH D-F.F.
E-E Ⓛ
E-E Ⓗ
A1 ~ A8
IC44 (Y) 2H DELAY CLK RST
A01 ~ A08
FROM IC57-11
FROM IC60-16
FROM IC60-9
G1 ~ G8
4.43MHz BPF PEDESTAL LEVEL CTL (C)
IC47
IC61 ~ IC62 DATA SELECT
B0 ~ B8
+5V
FROM IC57-8
FROM IC60-16
C1 ~ C8
CLK RST (C) 2H DELAY
IC25 D-A CONV.
C01 ~ C08
IC50 LATCH
F1 ~ F8
IC48
Y COMB FILTER
C COMB FILTER
0H
2H
D1 ~ D8
DA CLK
Y0 ~ Y8
FROM IC59-8
4H
E1 ~ E8
2H DELAY
CLK RST
IC22 D-A CONV.
Y01 ~ Y08
IC64 ~ IC67 DATA SELECTOR
FROM IC60-16
FROM IC57-8
IC49 LATCH
A11 ~ A17
A01 ~ A07
FROM IC60-16
IC60
DA CLA
IC60
IC59
CLK 3
CLK 2
AD CLK
CLK1
E-E Ⓗ
E-E Ⓛ
MEMORY
RESET SIGNAL GENERATOR
RST 1 (IC57-11)
RST 2 (IC57-8)
MAIN SIGNAL PATH IN REC MO
MAIN SIGNAL PATH IN PLAYBA

REF. NO 35000 SERIES


TP35005
Q2
AMP
VR1
IC2
Q29
Q3 ~ Q7
CLAMP
TP35005 1.8Vp-p REC
TP35005 1.6Vp-p PLAY
H
Q30
BUFFER
Q31
BUFFER
C51
Q13
BUFFER
4.4MHz
IC4
A-D CONV.
IC8
D0 ~ D7
C0 ~ C7
AD CLK
IC41
(Y) LATCH
OE
CLK
IC42
LATCH (C)
E-E Ⓛ
IC43
LATCH D-F.F.
E-E Ⓗ
IC44
(Y) 2H DELAY
CLK RST
A1 ~ A8
A01 ~ A08
FROM IC57-11
FROM IC60-16
FROM IC60-9
4.43MHz BPF PEDESTAL LEVEL CTL (C)
IC47
G1 ~ G8
IC61 ~ IC62
DATA SELECT
B0 ~ B8
+5V
FROM IC57-8
FROM IC60-16
C1 ~ C8
CLK RST (C) 2H DELAY
IC48
C COMB FILTER
Y COMB FILTER
D1 ~ D8
E1 ~ E8
2H DELAY
4H
0H
2H
FROM IC59-8
IC25
D-A CONV.
C01 ~ C08
IC50
LATCH
F1 ~ F8
DA CLK
Y0 ~ Y8
IC64 ~ IC67
DATA SELECTOR
IC22
Y01 ~ Y08
IC49
LATCH
A11 ~ A17
A01 ~ A07
FROM IC60-16
Q21 ~ Q23
OUTPUT AMP
VR4
Q20
AMP
FL15
L.P.F. 7MHz
Q25 ~ Q27
OUTPUT AMP
VR5
Q15 ~ Q18
OUTPUT AMP
FL14
L.P.F. 7MHz
D2
E-E Ⓗ
PAL Ⓛ
IC21
AMP
IC21, X1
OSC
VR3
CLK
IC60
DA CLA
IC59
CLK 3
CLK 2
AD CLK
CLK 1
MEMORY
RESET SIGNAL GENERATOR
RST 1 (IC57-11)
RST 2 (IC57-8)
S1
S2
CLP

◀ MAIN SIGNAL PATH IN REC MODE.

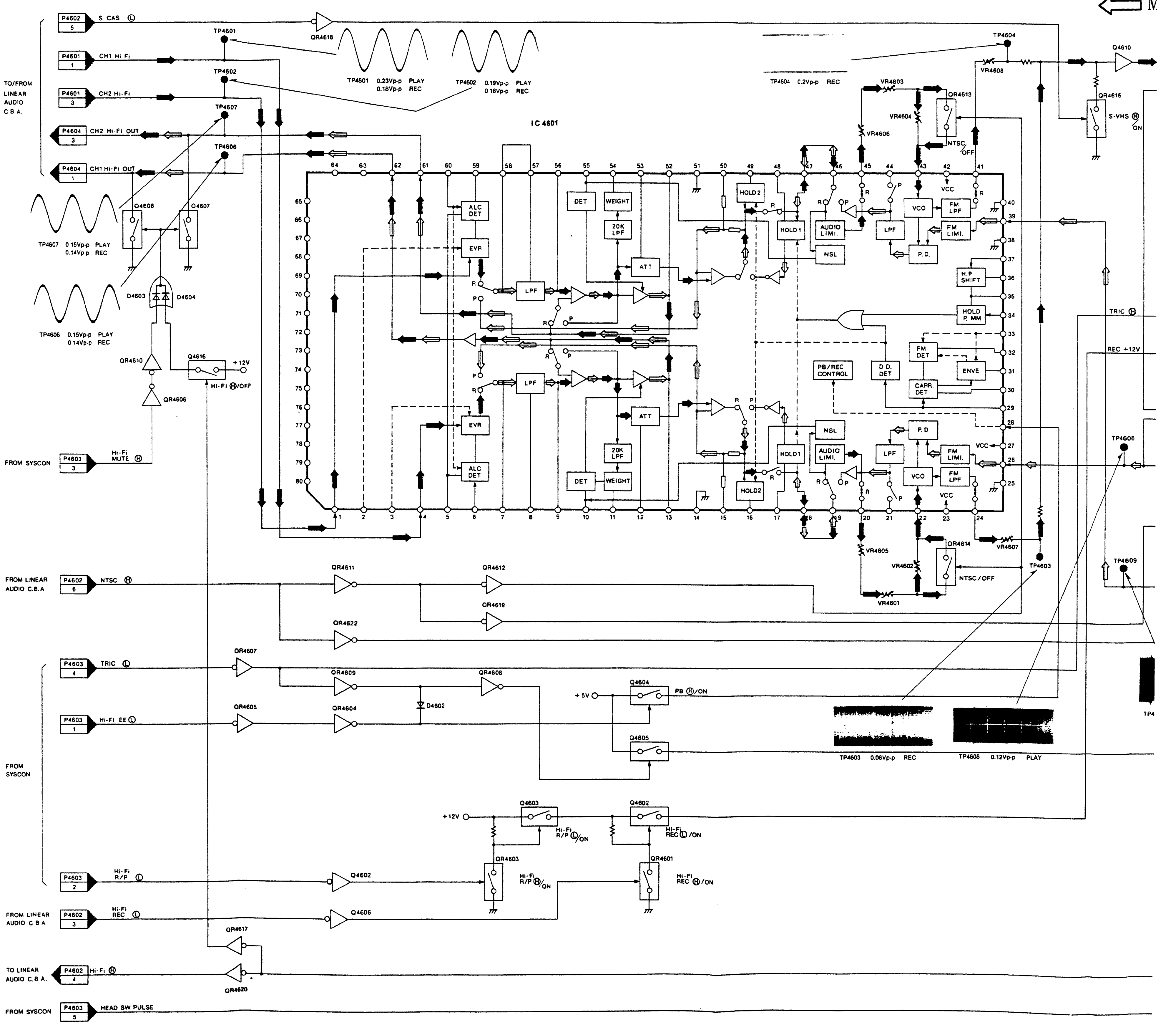
◀■ MAIN SIGNAL PATH IN PLAYBACK MODE.

REF. NO 35000 SERIES

Hi-Fi AUDIO BLOCK

Y/C SEPARATION BLOCK

Hi-Fi AUDIO BLOCK DIAGRAM

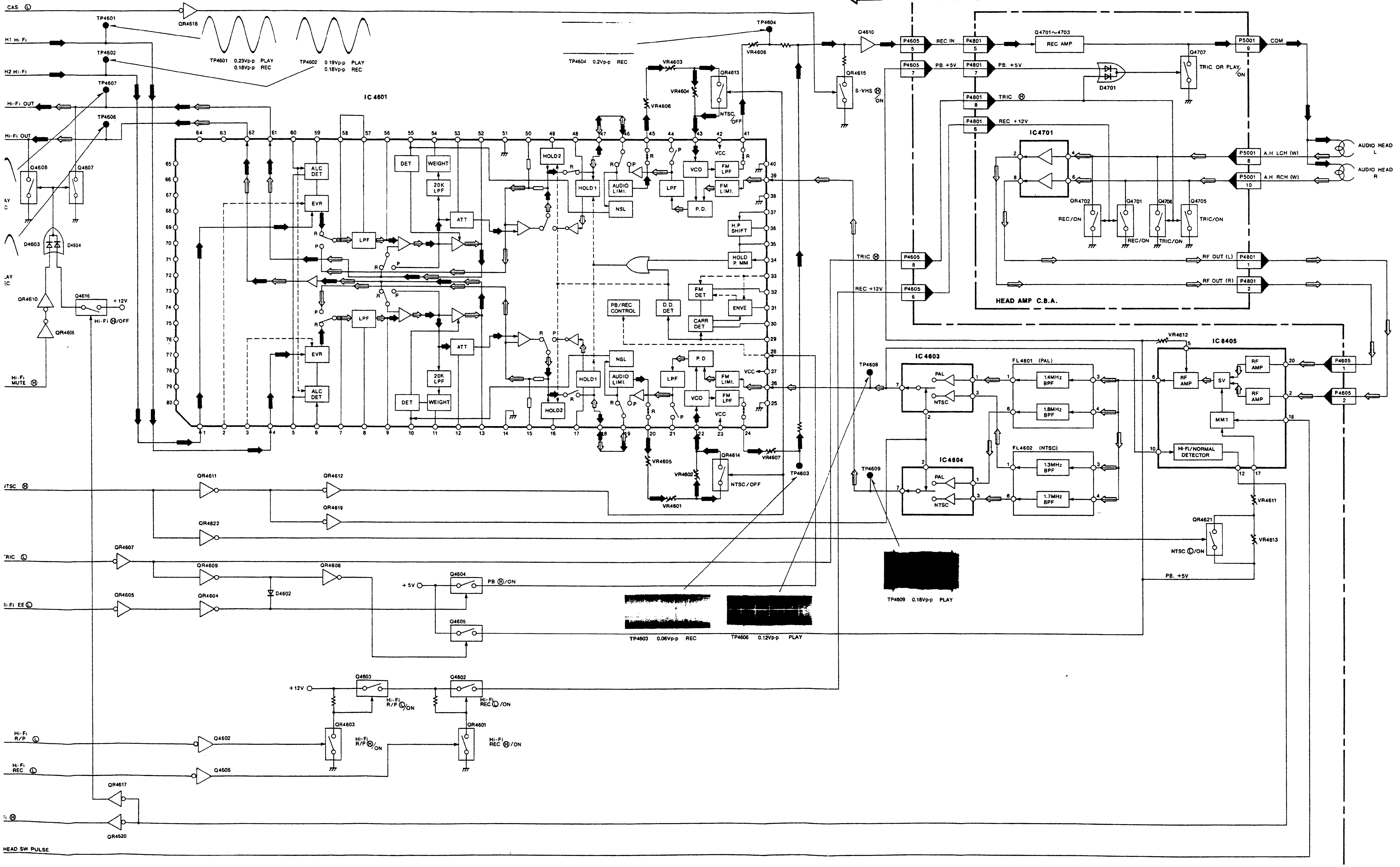


P4602 5 S CAS Ⓛ
QR4618
TP4601
TP4602
TP4607
TP4606
P4601 1 CH1 Hi Fi
P4601 3 CH2 Hi-Fi
P4604 3 CH2 Hi-Fi OUT
P4604 1 CH1 Hi-Fi OUT
TO/FROM LINEAR AUDIO C.B.A.
TP4601 0.23Vp-p PLAY 0.18Vp-p REC
TP4602 0.19Vp-p PLAY 0.18Vp-p REC
TP4604 0.2Vp-p REC
TP4607 0.15Vp-p PLAY 0.14Vp-p REC
TP4606 0.15Vp-p PLAY 0.14Vp-p REC
Q4608
Q4607
D4603
D4604
QR4610
QR4606
Q4616
+12V
Hi-Fi Ⓗ/OFF
FROM SYSCON
P4603 3 Hi-Fi MUTE Ⓗ
IC 4601
ALC DET
EVR
LPF
DET
WEIGHT
20K LPF
ATT
HOLD 2
HOLD 1
AUDIO LIMI.
NSL
LPF
VCO
FM LPF
FM LIMI.
P.D.
H.P SHIFT
HOLD P. MM
FM DET
ENVE
CARR. DET
D.O. DET
PB/REC CONTROL
VCC
R
P
VR4603
VR4604
VR4606
VR4605
VR4602
VR4601
VR4607
VR4608
QR4613
QR4614
NTSC/OFF
TP4604
TP4603
TP4608
TP4609
Q4610
QR4615
S-VHS Ⓗ/ON
TRIC Ⓗ
REC +12V
FROM LINEAR AUDIO C.B.A
P4602 6 NTSC Ⓗ
QR4611
QR4612
QR4619
QR4622
P4603 4 TRIC Ⓛ
QR4607
QR4609
QR4608
D4602
P4603 1 Hi-Fi EE Ⓛ
QR4605
QR4604
+5V
Q4604
PB Ⓗ/ON
Q4605
FROM SYSCON
TP4603 0.06Vp-p REC
TP4608 0.12Vp-p PLAY
+12V
Q4603
Hi-Fi R/P Ⓛ/ON
Q4602
Hi-Fi REC Ⓛ/ON
QR4603
Hi-Fi R/P Ⓗ/ON
QR4601
Hi-Fi REC Ⓗ/ON
P4603 2 Hi-Fi R/P Ⓛ
Q4602
FROM LINEAR AUDIO C.B.A.
P4602 3 Hi-Fi REC Ⓛ
Q4606
QR4617
TO LINEAR AUDIO C.B.A.
P4602 4 Hi-Fi Ⓗ
QR4620
FROM SYSCON
P4603 5 HEAD SW PULSE

IO BLOCK DIAGRAM

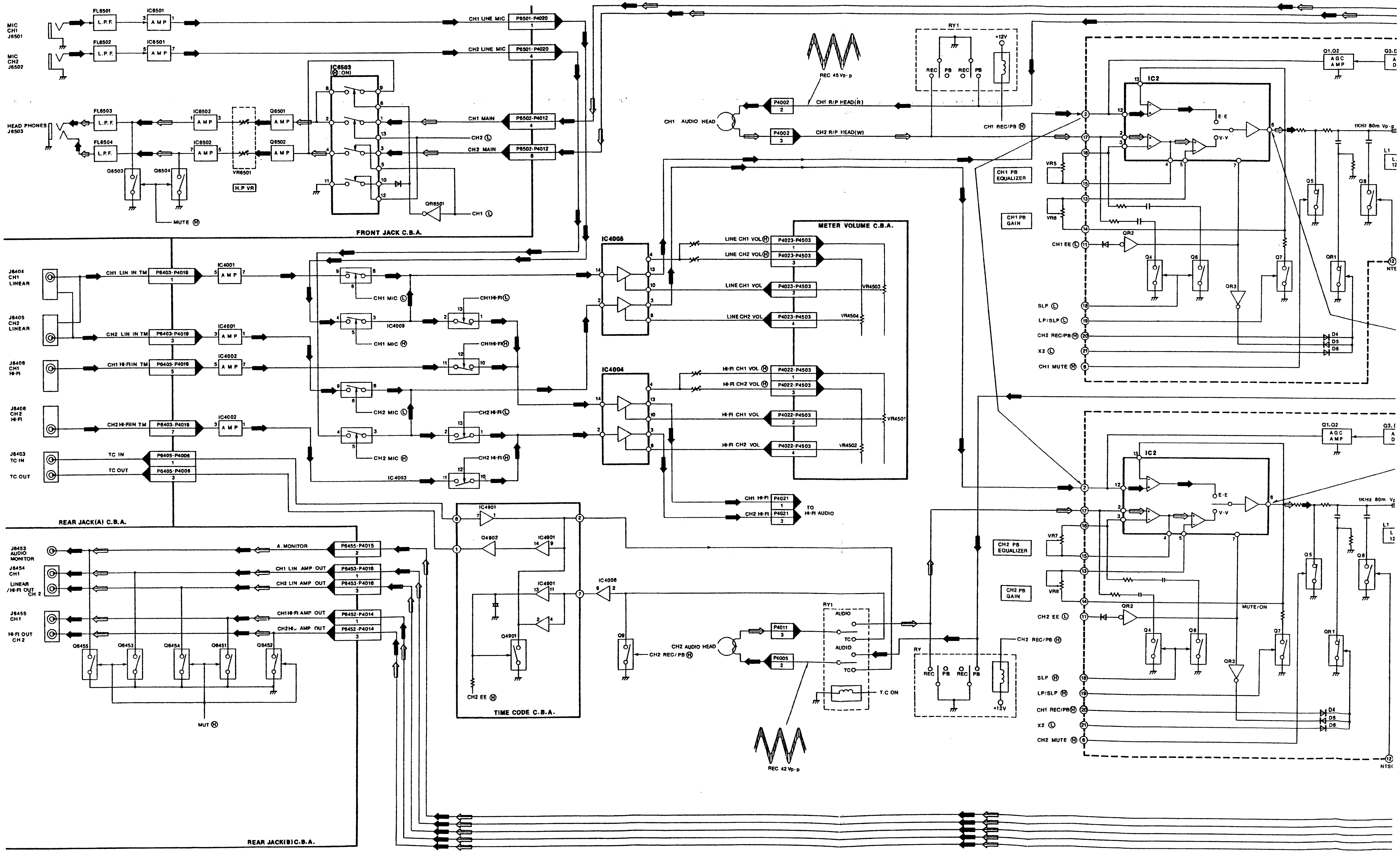
MAIN SIGNAL PATH IN REC MODE.

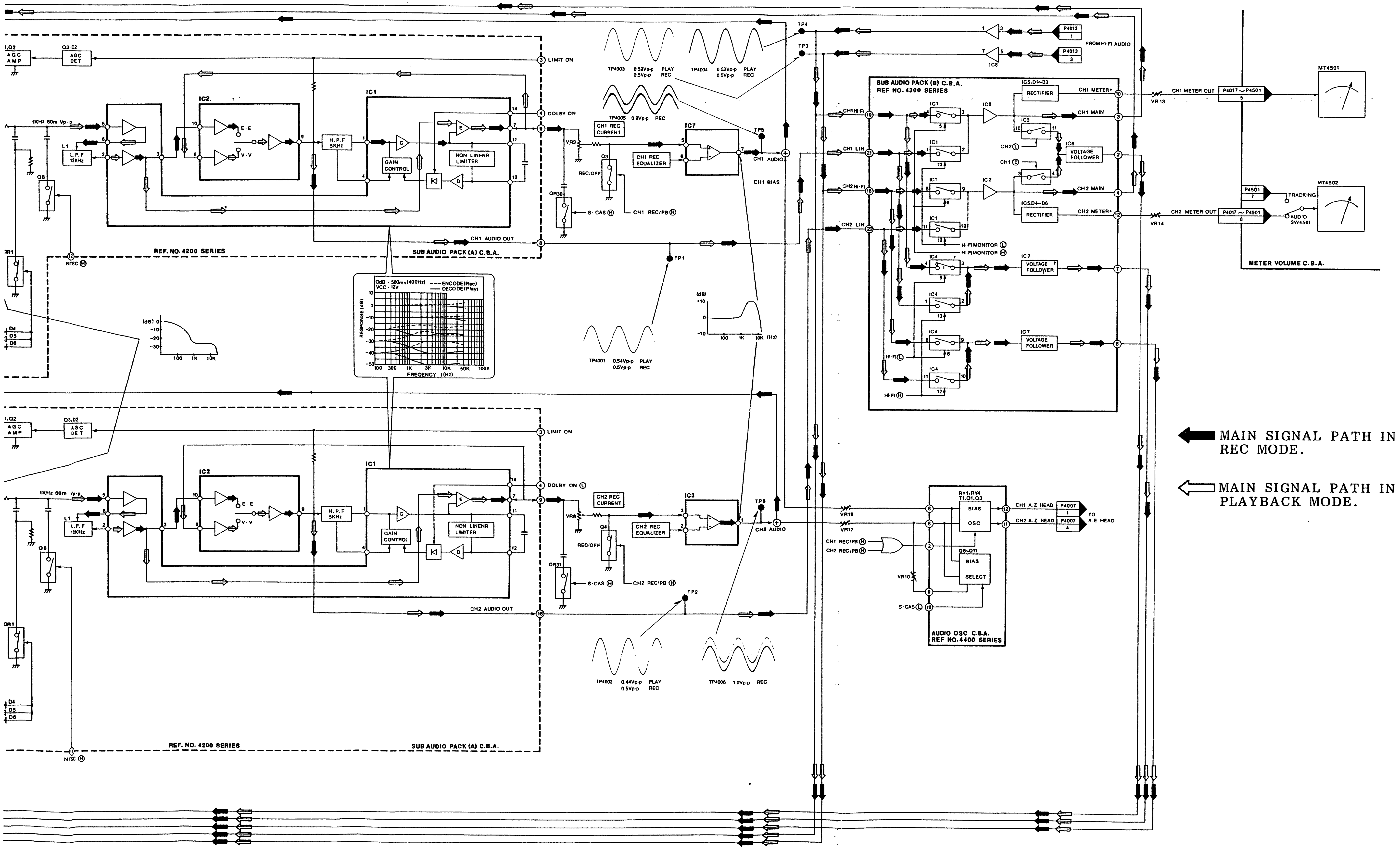
MAIN SIGNAL PATH IN PLAYBACK MODE.


CAS Ⓛ
QR4618
TP4601
H1 Hi Fi
TP4602
H2 Hi-Fi
TP4607
Hi-Fi OUT
TP4606
Hi-Fi OUT
TP4601 0.23Vp-p PLAY 0.18Vp-p REC
TP4602 0.19Vp-p PLAY 0.18Vp-p REC
TP4604 0.2Vp-p REC
IC4601
Q4608
Q4607
D4603
D4604
QR4610
Q4616
+12V
Hi-Fi Ⓗ/OFF
QR4606
Hi-Fi MUTE Ⓗ
ALC DET
EVR
DET
WEIGHT
20K LPF
ATT
LPF
HOLD2
HOLD1
AUDIO LIMI.
NSL
VCO
FM LPF
FM LIMI.
P.D.
H.P SHIFT
HOLD P. MM
FM DET
ENVE
D.D. DET
CARR DET
PB/REC CONTROL
VCC
TP4604
VR4608
VR4603
VR4604
VR4606
QR4613
NTSC OFF
VR4605
VR4602
QR4614
NTSC/OFF
VR4601
VR4607
TP4603
Q4610
QR4615
S-VHS Ⓗ ON
P4605
REC IN
PB +5V
TRIC Ⓗ
REC +12V
P4801
PB. +5V
TRIC Ⓗ
REC +12V
Q4701~4703
REC AMP
D4701
Q4707
TRIC OR PLAY ON
P5001
COM
IC4701
A.H LCH (W)
A.H RCH (W)
AUDIO HEAD L
AUDIO HEAD R
QR4702
Q4701
Q4706
Q4705
REC/ON
TRIC/ON
RF OUT (L)
RF OUT (R)
HEAD AMP C.B.A.
VR4612
IC6405
RF AMP
SV
MM1
Hi-Fi/NORMAL DETECTOR
P4605
TP4608
IC4603
PAL
NTSC
FL4601 (PAL)
1.4MHz BPF
1.8MHz BPF
FL4602 (NTSC)
1.3MHz BPF
1.7MHz BPF
TP4609
IC4604
VR4611
QR4621
VR4613
NTSC Ⓛ/ON
PB. +5V
TP4609 0.18Vp-p PLAY
TP4603 0.06Vp-p REC
TP4606 0.12Vp-p PLAY
NTSC Ⓗ
QR4611
QR4612
QR4619
QR4622
TRIC Ⓛ
QR4607
QR4609
QR4608
Q4604
+5V
PB Ⓗ/ON
Hi-Fi EE Ⓛ
QR4605
QR4604
D4602
Q4605
+12V
Q4603
Q4602
Hi-Fi R/P Ⓛ/ON
Hi-Fi REC Ⓛ/ON
QR4603
QR4601
Hi-Fi R/P Ⓗ/ON
Hi-Fi REC Ⓗ/ON
Hi-Fi R/P Ⓛ
Q4602
Hi-Fi REC Ⓛ
Q4606
QR4617
QR4620
HEAD SW PULSE

NORMAL AUDIO BLOCK DIAGRAM

AG-7330 PAL (NORMAL AUDIO)


MIC CH1 J6501
MIC CH2 J6502
FL6501
FL6502
FL6503
FL6504
L.P.F.
IC6501
IC6502
AMP
HEAD PHONES J6503
VR6501
H.P VR
Q6501
Q6502
Q6503
Q6504
MUTE Ⓗ
IC6503 (Ⓗ:ON)
QR6501
CH1 Ⓛ
CH2 Ⓛ
CH1 LINE MIC
CH2 LINE MIC
P6501-P4020
CH1 MAIN
CH2 MAIN
P6502-P4012
FRONT JACK C.B.A.
J6404 CH1 LINEAR
J6405 CH2 LINEAR
J6406 CH1 HI-FI
J6406 CH2 HI-FI
J6403 TC IN
TC OUT
CH1 LIN IN TM
CH2 LIN IN TM
CH1 HI-FI IN TM
CH2 HI-FI IN TM
P6403-P4019
TC IN
TC OUT
P6405-P4006
REAR JACK(A) C.B.A.
IC4001
IC4002
IC4003
IC4009
CH1 MIC Ⓛ
CH1 MIC Ⓗ
CH2 MIC Ⓛ
CH2 MIC Ⓗ
CH1 HI-FI Ⓛ
CH1 HI-FI Ⓗ
CH2 HI-FI Ⓛ
CH2 HI-FI Ⓗ
IC4005
IC4004
METER VOLUME C.B.A.
LINE CH1 VOL Ⓗ
LINE CH2 VOL Ⓗ
LINE CH1 VOL
LINE CH2 VOL
P4023-P4503
VR4503
VR4504
HI-FI CH1 VOL Ⓗ
HI-FI CH2 VOL Ⓗ
HI-FI CH1 VOL
HI-FI CH2 VOL
P4022-P4503
VR4501
VR4502
CH1 HI-FI
CH2 HI-FI
P4021
TO HI-FI AUDIO
J6453 AUDIO MONITOR
J6454 CH1 LINEAR /HI-FI OUT CH 2
J6455 CH1 HI-FI OUT CH 2
A. MONITOR
P6455-P4015
CH1 LIN AMP OUT
CH2 LIN AMP OUT
P6453-P4016
CH1 HI-FI AMP OUT
CH2 HI-FI AMP OUT
P6452-P4014
Q6455
Q6453
Q6454
Q6451
Q6452
MUT Ⓗ
REAR JACK(B) C.B.A.
IC4901
Q4902
Q4901
CH2 EE Ⓗ
TIME CODE C.B.A.
IC4006
Q9
CH2 REC/PB Ⓗ
REC 45 Vp-p
CH1 AUDIO HEAD
P4002
CH1 R/P HEAD(R)
CH2 R/P HEAD(W)
RY1
REC PB REC PB
+12V
CH1 REC/PB Ⓗ
CH2 AUDIO HEAD
P4011
P4005
AUDIO
TC
T.C ON
RY
CH2 REC/PB Ⓗ
REC 42 Vp-p
IC2
E-E
V-V
Q1,Q2 AGC AMP
Q3
1KHz 80m Vp-p
L1
VR5
VR6
VR7
VR8
CH1 PB EQUALIZER
CH1 PB GAIN
CH2 PB EQUALIZER
CH2 PB GAIN
CH1 EE Ⓛ
CH2 EE Ⓛ
QR1
QR2
QR3
Q4
Q5
Q6
Q7
Q8
MUTE/ON
SLP Ⓛ
LP/SLP Ⓛ
CH2 REC/PB Ⓗ
X2 Ⓛ
CH1 MUTE Ⓗ
SLP Ⓗ
LP/SLP Ⓗ
CH1 REC/PB Ⓗ
CH2 MUTE Ⓗ
D4
D5
D6
NTSC

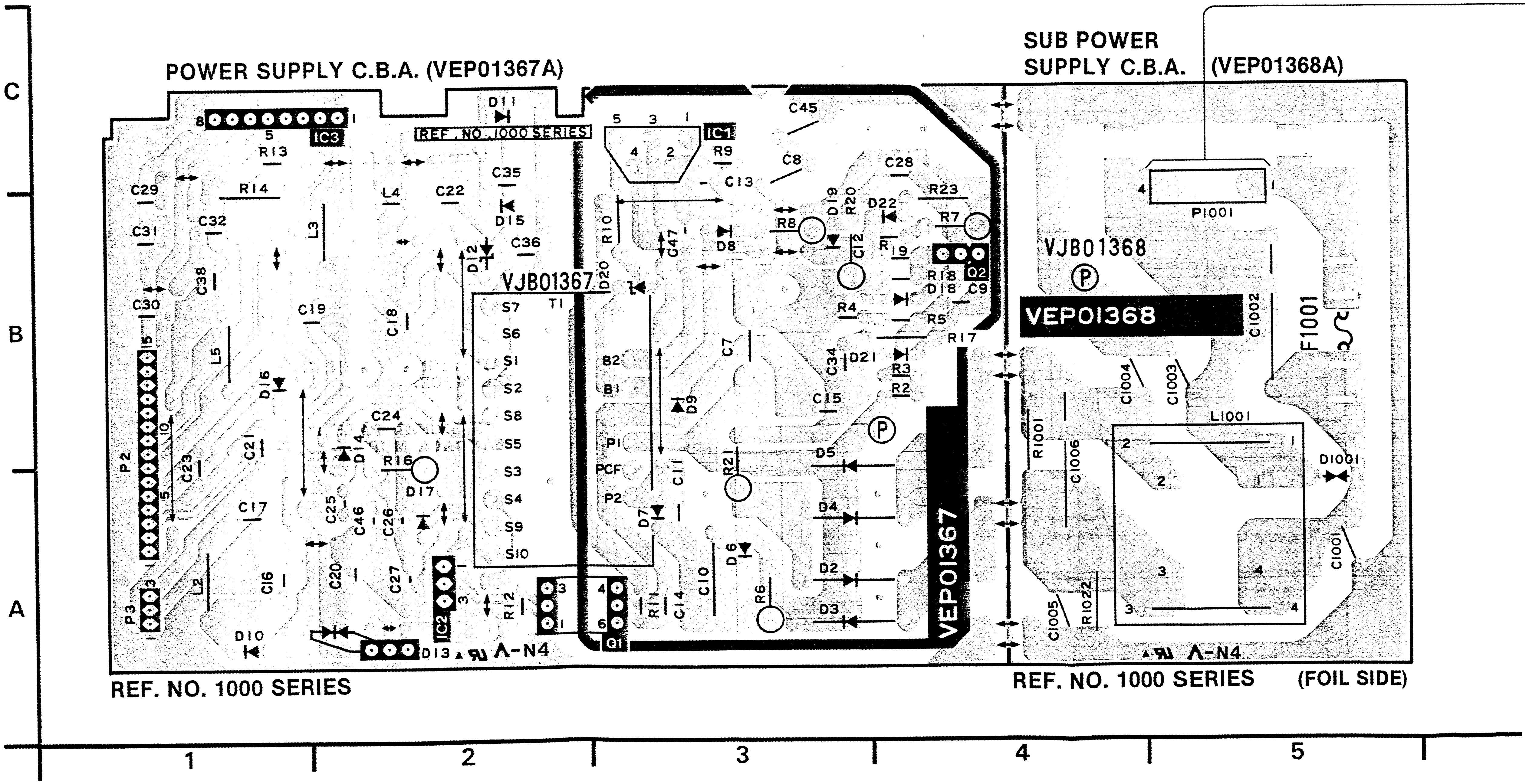


Q3,Q2 AGC DET
AGC AMP
LIMIT ON
DOLBY ON
DOLBY ON Ⓛ
IC2
IC1
E-E
V-V
H.P.F 5KHz
L.P.F 12KHz
GAIN CONTROL
NON LINENR LIMITER
1KHz 80m Vp-p
Q8
QR1
NTSC Ⓗ
D4
D5
D6
CH1 AUDIO OUT
CH2 AUDIO OUT
REF. NO. 4200 SERIES
SUB AUDIO PACK (A) C.B.A.
(dB) 0 -10 -20 -30 100 1K 10K
0dB : 580mv(400Hz) VCC : 12V
ENCODE(Rec)
DECODE(Play)
RESPONSE (dB)
FREQENCY f(Hz)
TP4003 0.52Vp-p PLAY 0.5Vp-p REC
TP4004 0.52Vp-p PLAY 0.5Vp-p REC
TP4005 0.9Vp-p REC
TP4001 0.54Vp-p PLAY 0.5Vp-p REC
TP4002 0.44Vp-p PLAY 0.5Vp-p REC
TP4006 1.0Vp-p REC
VR3
VR6
Q3
Q4
QR30
QR31
REC/OFF
S-CAS Ⓗ
CH1 REC/PB Ⓗ
CH2 REC/PB Ⓗ
CH1 REC CURRENT
CH2 REC CURRENT
CH1 REC EQUALIZER
CH2 REC EQUALIZER
IC7
IC3
TP1
TP2
TP3
TP4
TP5
TP6
CH1 AUDIO
CH2 AUDIO
CH1 BIAS
(dB) +10 0 -10 100 1K 10K (Hz)
IC8
P4013
FROM HI-FI AUDIO
SUB AUDIO PACK (B) C.B.A.
REF NO. 4300 SERIES
CH1 HI-FI
CH1 LIN
CH2 HI-FI
CH2 LIN
IC5,D1~D3
IC5,D4~D6
RECTIFIER
CH1 METER+
CH2 METER+
CH1 MAIN
CH2 MAIN
IC6 VOLTAGE FOLLOWER
CH2 Ⓛ
CH1 Ⓛ
HI-FI MONITOR Ⓛ
HI-FI MONITOR Ⓗ
IC4
IC7 VOLTAGE FOLLOWER
HI-FI Ⓛ
HI-FI Ⓗ
VR13
VR14
CH1 METER OUT
CH2 METER OUT
P4017 ~ P4501
P4501
TRACKING
AUDIO SW4501
MT4501
MT4502
METER VOLUME C.B.A.
VR16
VR17
VR10
CH1 REC/PB Ⓗ
CH2 REC/PB Ⓗ
S-CAS Ⓛ
RY1,RY4 T1,Q1,Q3
BIAS
OSC
Q6~Q11
BIAS SELECT
AUDIO OSC C.B.A. REF NO.4400 SERIES
CH1 A.Z HEAD
CH2 A.Z HEAD
P4007
TO A.E HEAD

MAIN SIGNAL PATH IN REC MODE.

MAIN SIGNAL PATH IN PLAYBACK MODE.

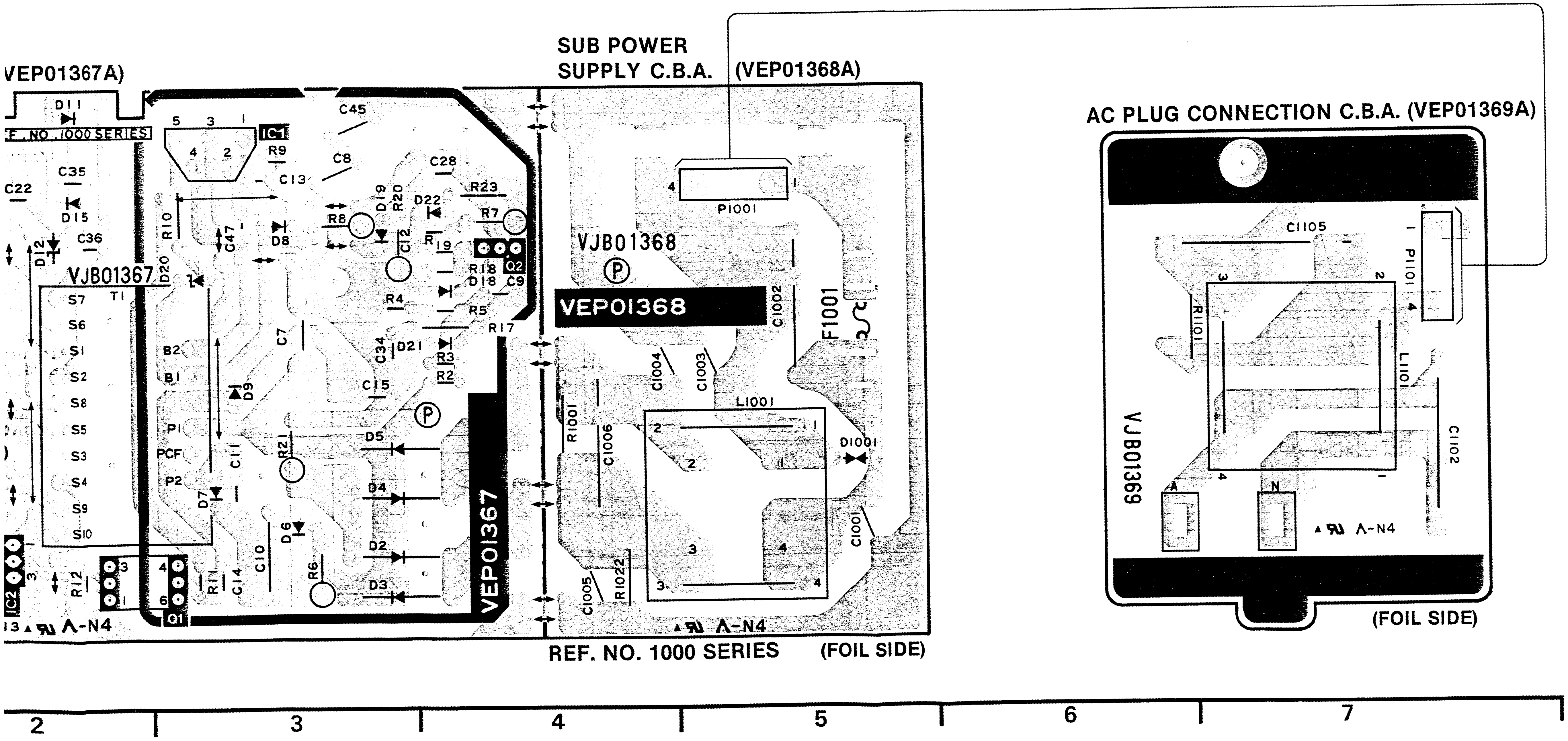
POWER SUPPLY C.B.A. (VEP01367A), SUB POWER SUPPLY C.B.A. (VEP01368A) & AC PLUG CONNECTION C.B.A. (VEP01369A)


POWER SUPPLY C.B.A. (VEP01367A)
SUB POWER SUPPLY C.B.A.
(VEP01368A)
REF. NO. 1000 SERIES
REF. NO. 1000 SERIES
(FOIL SIDE)
VJB01367
VEP01367
VJB01368
VEP01368
IC1
IC2
IC3
Q1
Q2
T1
P1001
F1001
L1001
D1001
P2
P3
A
B
C
1
2
3
4
5

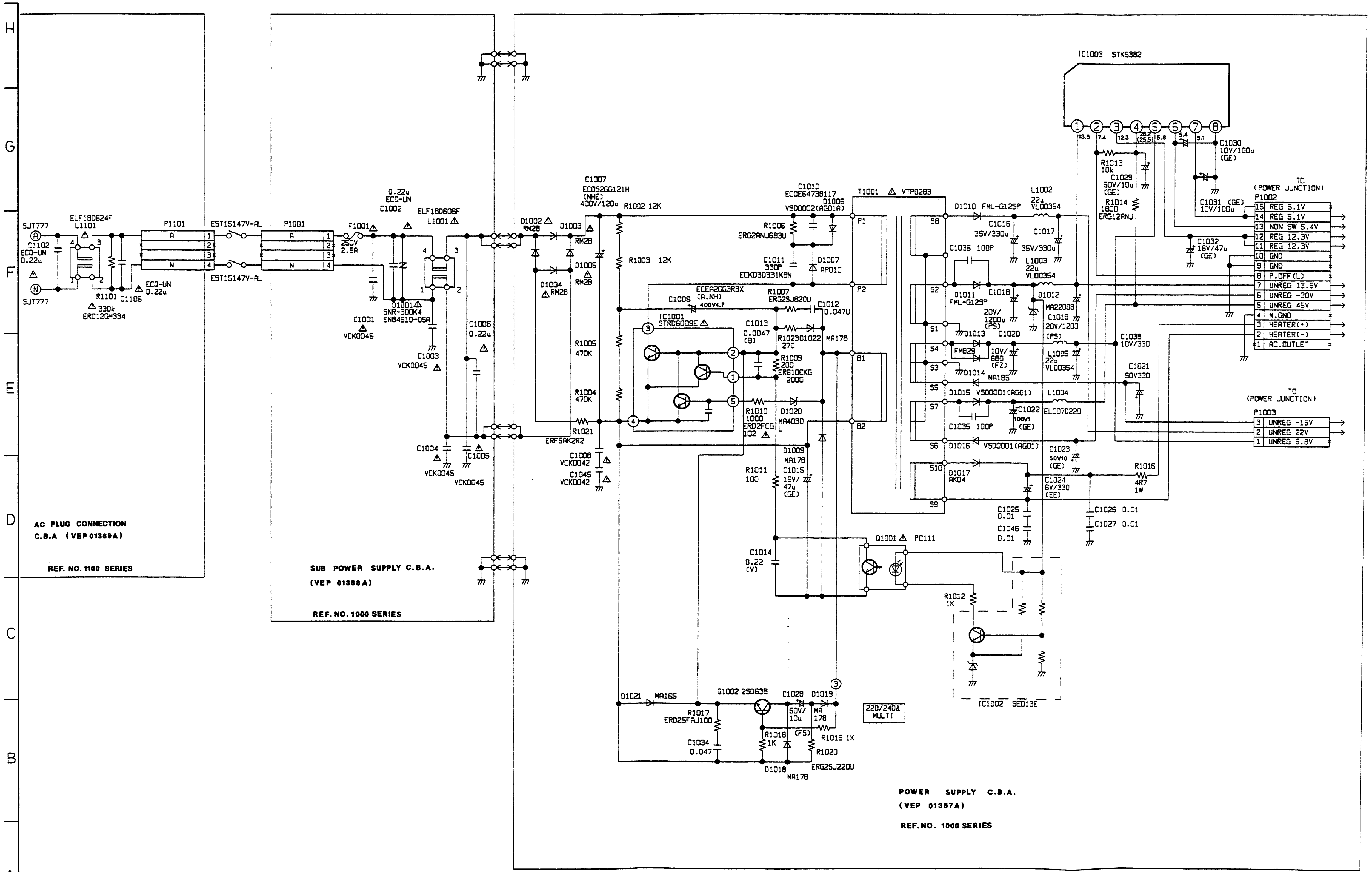
), SUB POWER SUPPLY C.B.A. (VEP01368A) & AC PLUG CONNECTION C.B.A. (VEP01369A)

POWER SUPPLY C.B.A., SUB POWER SUPPLY C.B.A. & AC PLUG CONNECTION C.B.A.	
Transistor	
Q1001 Q1002	A-2 B-4
Integrated Circuit	
IC1001 IC1002 IC1003	C-3 A-2 C-1
Connector	
P1001 P1002 P1003 P1101	C-5 B-1 A-1 B-7

ADDRESS INFORMATION


VEP01367A)
SUB POWER SUPPLY C.B.A. (VEP01368A)
AC PLUG CONNECTION C.B.A. (VEP01369A)
D11
F. NO. 1000 SERIES
C35
C22
D15
C36
D12
VJB01367
T1
S7
S6
S1
S2
S8
S5
S3
S4
S9
S10
IC2
3
R12
13
Λ-N4
5 3 1
4 2
IC1
R9
C13
C45
C8
C28
R23
R10
C47
D8
R8
D19
R20
D22
R7
C12
R19
Q2
R18
D18
C9
D20
R4
R5
R17
B2
B1
C7
C34
D21
R3
R2
C15
D9
P1
PCF
P2
C11
R21
D5
D4
D7
D6
D2
D3
C10
C14
R11
R6
3
2
1
4
6
Q1
VEP01367
P
P1001
4
1
VJB01368
P
VEP01368
C1002
F1001
C1004
C1003
L1001
R1001
C1006
D1001
2
1
3
4
C1001
C1005
R1022
Λ-N4
REF. NO. 1000 SERIES
(FOIL SIDE)
C1105
P1101
1
4
2
3
R1101
L1101
C1102
VJB01369
A
N
Λ-N4
(FOIL SIDE)
2
3
4
5
6
7

POWER SUPPLY SCHEMATIC DIAGRAM

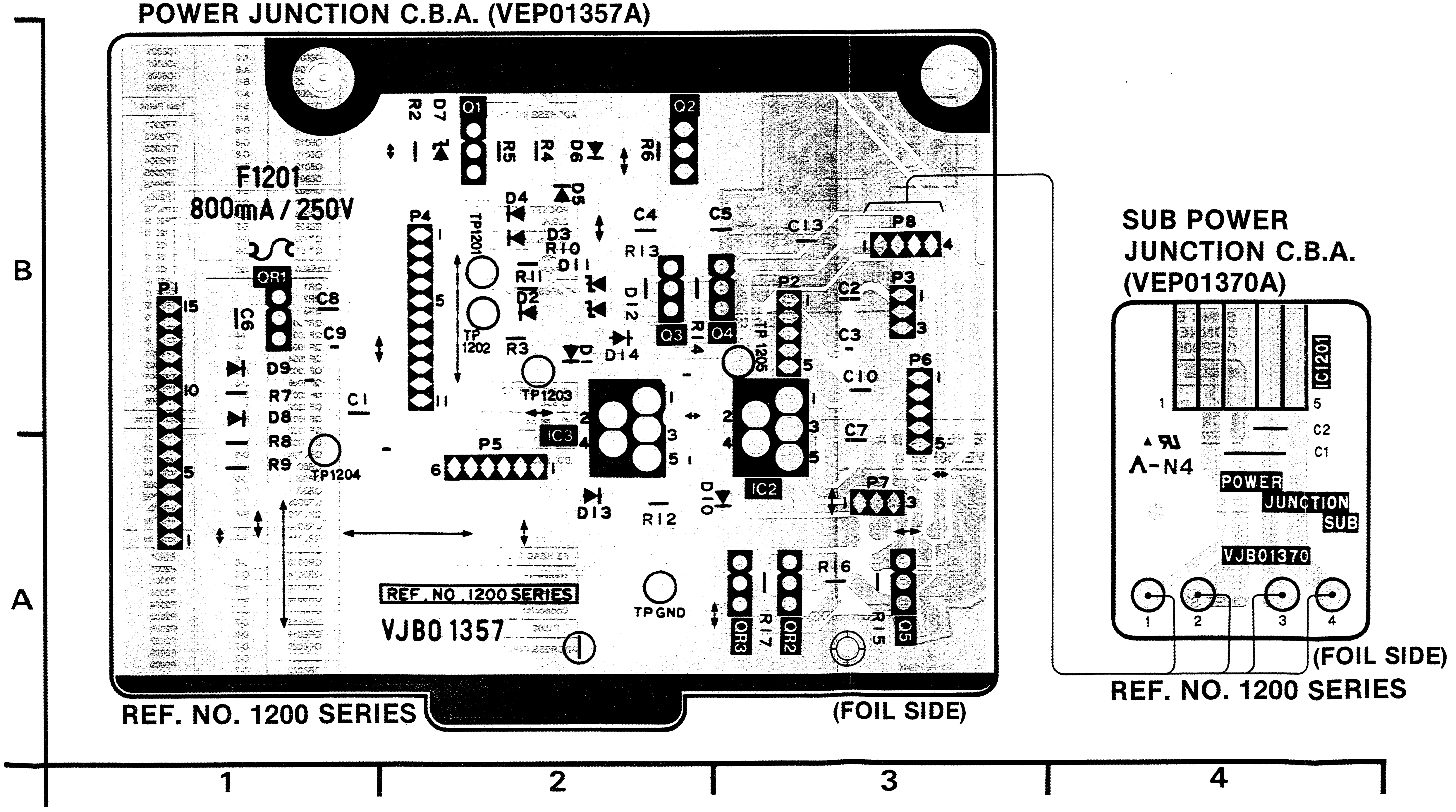

AC PLUG CONNECTION
C.B.A (VEP01369A)
REF. NO. 1100 SERIES
SUB POWER SUPPLY C.B.A.
(VEP 01368A)
REF. NO. 1000 SERIES
POWER SUPPLY C.B.A.
(VEP 01367A)
REF.NO. 1000 SERIES
IC1003 STK5382
IC1001 STRD6009E
IC1002 SE013E
T1001 VTP0283
D1001 PC111
Q1002 2SD638
220/240 MULTI
TO (POWER JUNCTION) P1002
15 REG 5.1V
14 REG 5.1V
13 NON SW 5.4V
12 REG 12.3V
11 REG 12.3V
10 GND
9 GND
8 P.OFF(L)
7 UNREG 13.5V
6 UNREG -30V
5 UNREG 45V
4 M.GND
3 HEATER(+)
2 HEATER(-)
1 AC.OUTLET
TO (POWER JUNCTION) P1003
3 UNREG -15V
2 UNREG 22V
1 UNREG 5.8V
P1101
P1001
F1001 250V 2.5A
L1101 ELF18D624F
L1001 ELF18D606F
SJT777
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS REC MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE.
MEASUREMENT SIGNAL...PAL COLOUR SIGNAL. MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

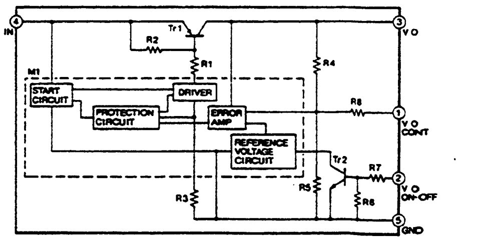
POWER JUNCTION C.B.A. (VEP01357A) & SUB POWER JUNCTION C.B.A. (VEP01370A)


POWER JUNCTION C.B.A. (VEP01357A)
F1201
800mA / 250V
QR1
C6
C8
C9
C1
P1
D9
R7
D8
R8
R9
TP1204
P4
TP1201
TP1202
R2
D7
Q1
R5
R4
D6
R6
Q2
D4
D5
D3
R10
D11
R11
D2
R3
D14
D12
TP1203
IC3
P5
D13
R12
C4
R13
C5
C13
Q3
Q4
R14
TP1205
IC2
D10
P2
P8
C2
P3
C3
C10
P6
C7
P7
R16
QR3
R17
QR2
R15
Q5
REF. NO. 1200 SERIES
VJB0 1357
TP GND
REF. NO. 1200 SERIES
(FOIL SIDE)
SUB POWER JUNCTION C.B.A. (VEP01370A)
IC1201
C2
C1
Λ-N4
POWER JUNCTION SUB
VJB01370
(FOIL SIDE)
REF. NO. 1200 SERIES
A
B
1
2
3
4

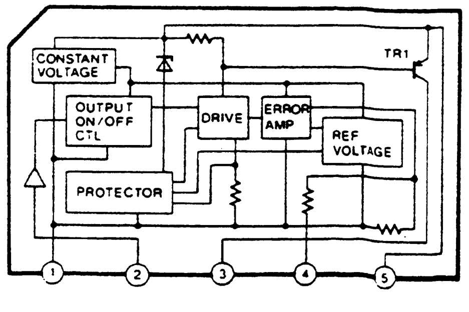
POWER JUNCTION C.B.A. & SUB POWER JUNCTION C.B.A.	
Transistor	
Q1201	B-2
Q1202	B-3
Q1203	B-2
Q1204	B-3
Q1205	A-3
Transistor & Resistor	
QR1201	B-1
QR1202	A-3
QR1203	A-3
Integrated Circuit	
IC1201	B-4
IC1202	A-3
IC1203	A-2
Test Point	
TP1201	B-2
TP1202	B-2
TP1203	B-2
TP1204	A-1
TPGND	A-2
Connector	
P1201	B-1
P1202	B-3
P1203	B-3
P1204	B-2
P1205	A-2
P1206	B-6
P1207	A-3
P1208	B-3

ADDRESS INFORMATION

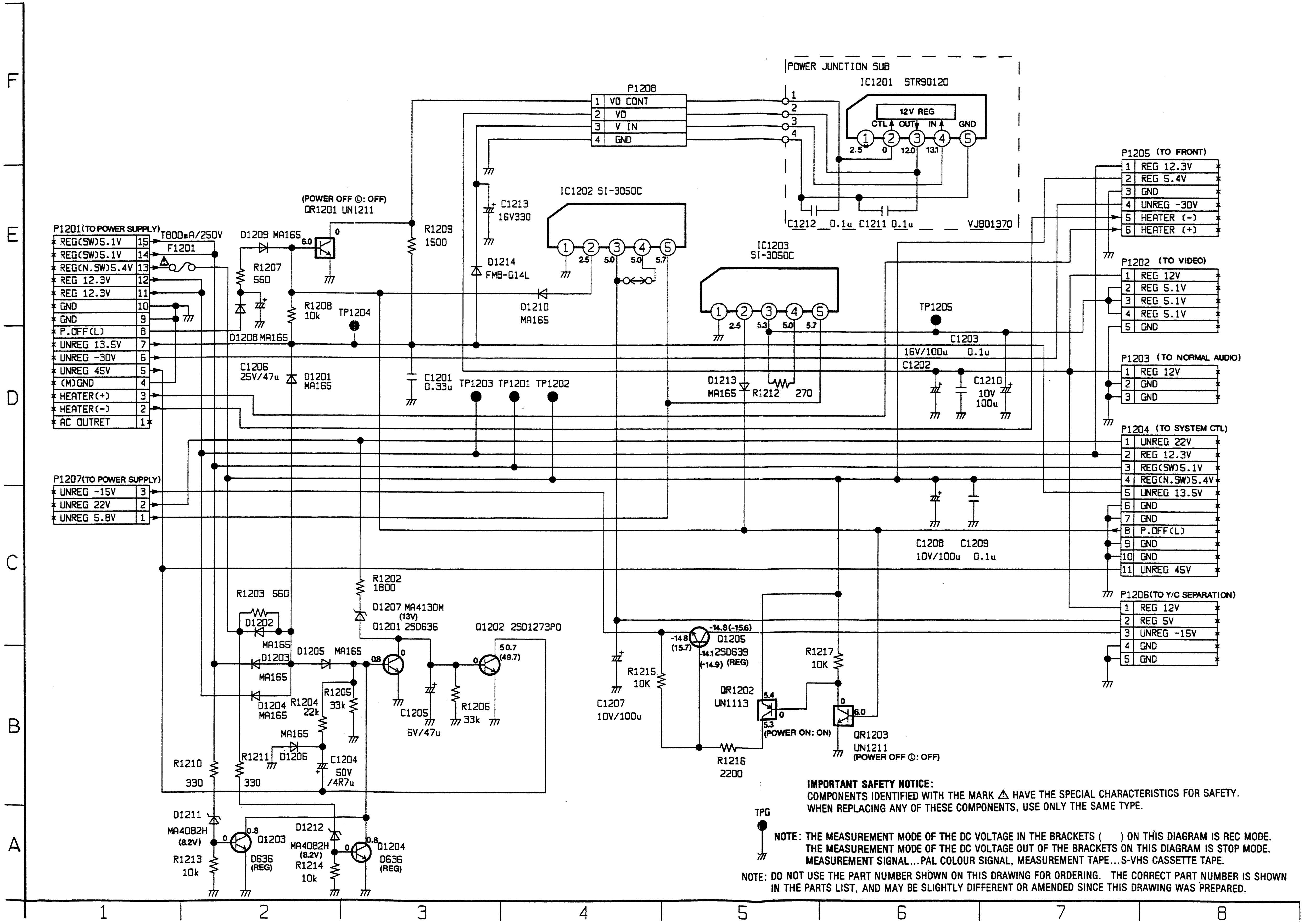
IC1201 STR90120


V IN
V O
V O CONT
V O ON-OFF
GND
Tr1
Tr2
R1
R2
R3
R4
R5
R6
R7
R8
M1
START CIRCUIT
DRIVER
PROTECTION CIRCUIT
ERROR AMP
REFERENCE VOLTAGE CIRCUIT
1
2
3
4
5

IC1202 SI-3050C


CONSTANT VOLTAGE
TR1
OUTPUT ON/OFF CTL
DRIVE
ERROR AMP
REF VOLTAGE
PROTECTOR
1
2
3
4
5

POWER JUNCTION SCHEMATIC DIAGRAM


F
E
D
C
B
A
1
2
3
4
5
6
7
8
P1201(TO POWER SUPPLY)
REG(SW)5.1V 15
REG(SW)5.1V 14
REG(N.SW)5.4V 13
REG 12.3V 12
REG 12.3V 11
GND 10
GND 9
P.OFF(L) 8
UNREG 13.5V 7
UNREG -30V 6
UNREG 45V 5
(M)GND 4
HEATER(+) 3
HEATER(-) 2
AC OUTRET 1
T800mA/250V
F1201
P1207(TO POWER SUPPLY)
UNREG -15V 3
UNREG 22V 2
UNREG 5.8V 1
D1209 MA165
R1207 560
D1208 MA165
R1208 10k
TP1204
C1206 25V/47u
D1201 MA165
(POWER OFF ⓒ: OFF)
QR1201 UN1211
R1209 1500
C1201 0.33u
TP1203 TP1201 TP1202
P1208
1 VO CONT
2 VO
3 V IN
4 GND
C1213 16V330
D1214 FMB-G14L
IC1202 SI-3050C
D1210 MA165
IC1203 SI-3050C
D1213 MA165
R1212 270
POWER JUNCTION SUB
IC1201 STR90120
12V REG
CTL OUT IN GND
C1212 0.1u C1211 0.1u
VJB01370
TP1205
C1203 16V/100u 0.1u
C1202
C1210 10V 100u
C1208 C1209 10V/100u 0.1u
P1205 (TO FRONT)
1 REG 12.3V
2 REG 5.4V
3 GND
4 UNREG -30V
5 HEATER (-)
6 HEATER (+)
P1202 (TO VIDEO)
1 REG 12V
2 REG 5.1V
3 REG 5.1V
4 REG 5.1V
5 GND
P1203 (TO NORMAL AUDIO)
1 REG 12V
2 GND
3 GND
P1204 (TO SYSTEM CTL)
1 UNREG 22V
2 REG 12.3V
3 REG(SW)5.1V
4 REG(N.SW)5.4V
5 UNREG 13.5V
6 GND
7 GND
8 P.OFF(L)
9 GND
10 GND
11 UNREG 45V
P1206(TO Y/C SEPARATION)
1 REG 12V
2 REG 5V
3 UNREG -15V
4 GND
5 GND
R1203 560
D1202 MA165
D1203 MA165
D1205 MA165
D1204 MA165
R1204 22k
R1205 33k
R1202 1800
D1207 MA4130M (13V)
Q1201 2SD636
Q1202 2SD1273PQ
C1205 6V/47u
R1206 33k
D1206 MA165
C1204 50V /4R7u
R1210 330
R1211 330
D1211 MA4082H (8.2V)
Q1203 D636 (REG)
R1213 10k
D1212 MA4082H (8.2V)
R1214 10k
Q1204 D636 (REG)
C1207 10V/100u
R1215 10K
Q1205 2SD639 (REG)
QR1202 UN1113
(POWER ON: ON)
R1216 2200
R1217 10K
QR1203 UN1211 (POWER OFF ⓒ: OFF)
TPG

IMPORTANT SAFETY NOTICE:
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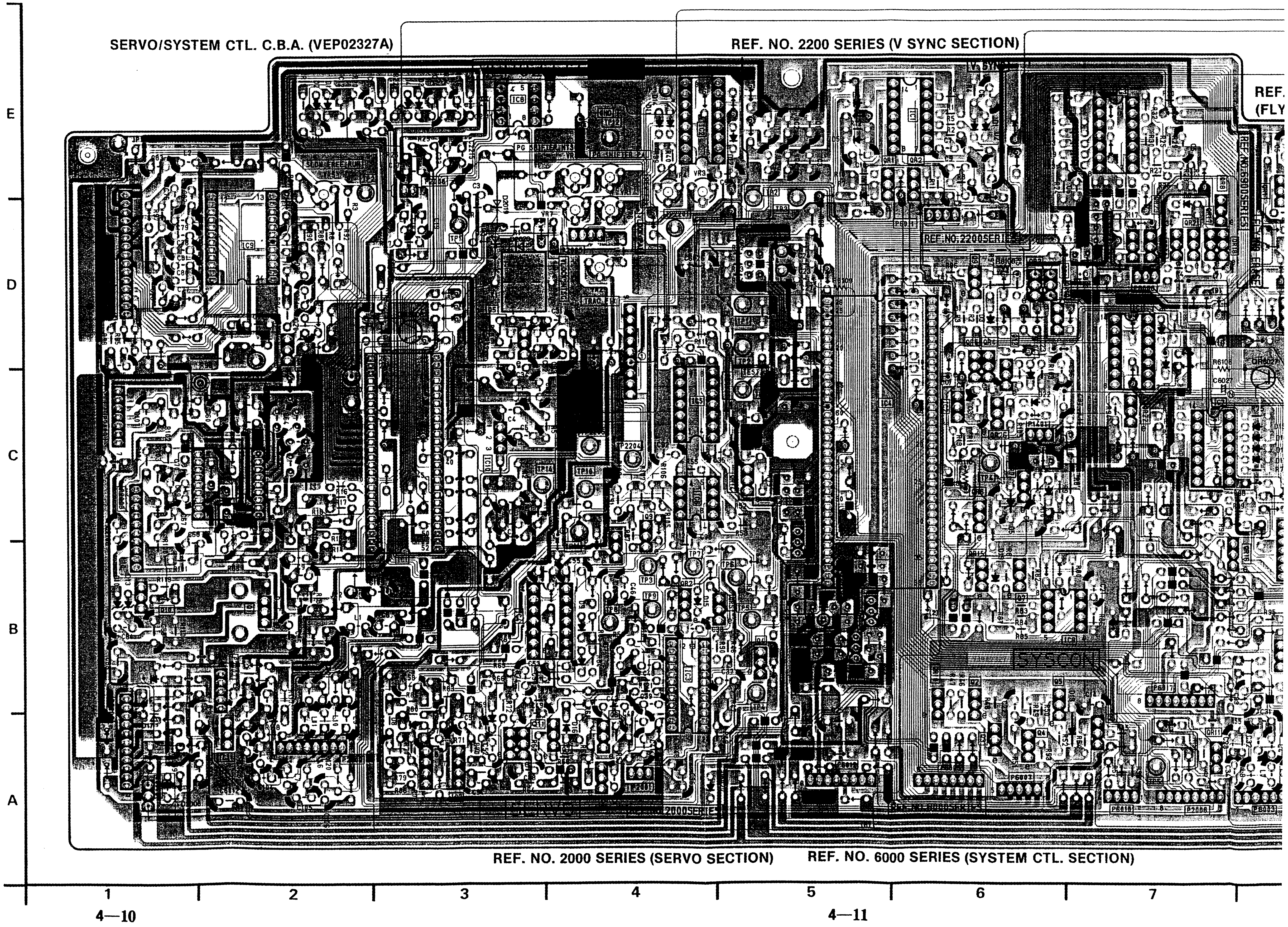
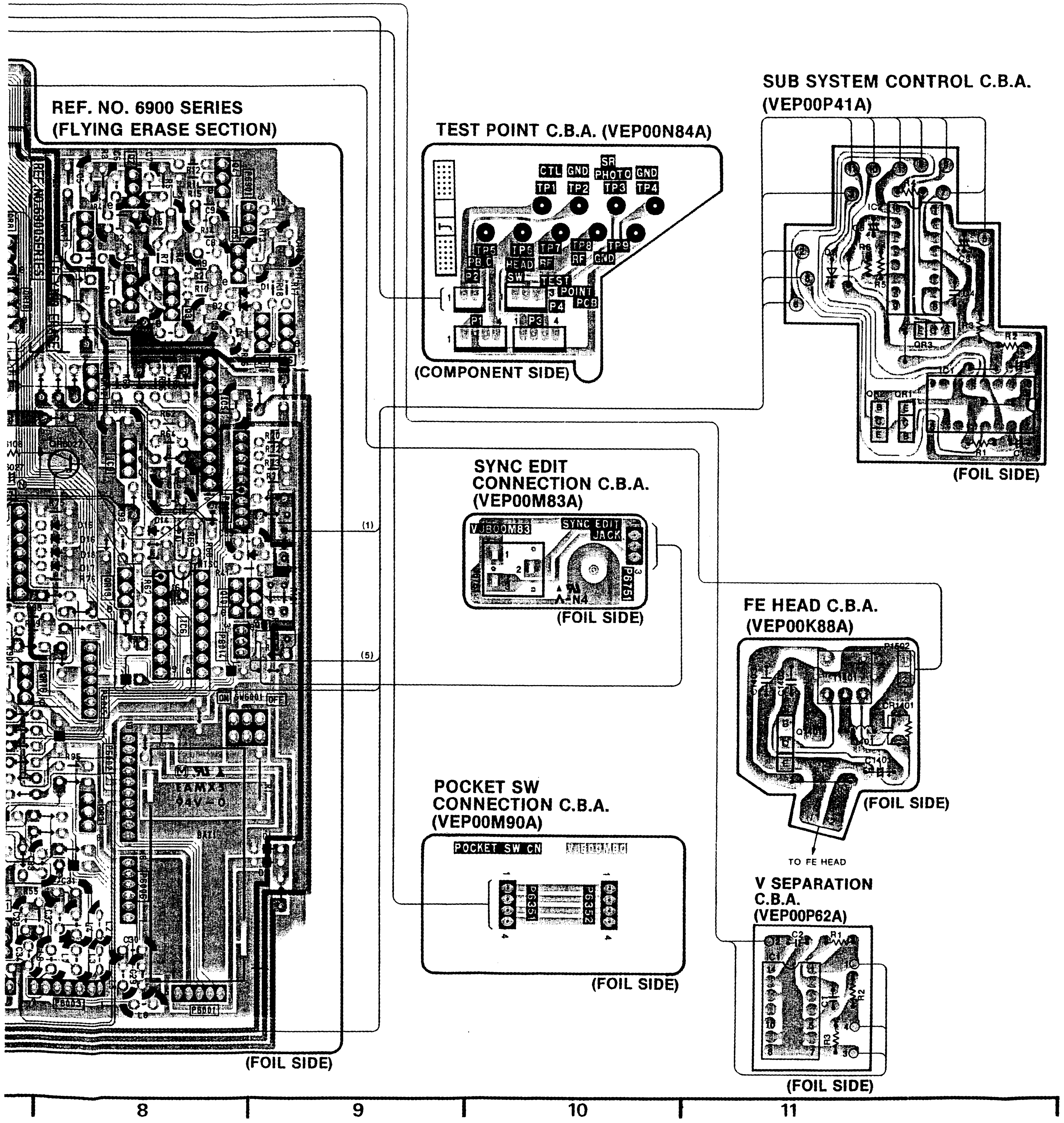
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

SERVO/SYSTEM CONTROL C.B.A. (VEP02327A), POCKET SW CONNECTION C.B.A. (VEP00M90A), SYNC EDIT CONNE TEST POINT C.B.A. (VEP00N84A), FE HEAD C.B.A. (VEP00K88A), SUB SYSTEM CONTROL C.B.A. (VEP00P41A) & V SE


SERVO/SYSTEM CTL. C.B.A. (VEP02327A)
REF. NO. 2200 SERIES (V SYNC SECTION)
REF.
(FLY
SYSCON
REF. NO. 2000 SERIES (SERVO SECTION)
REF. NO. 6000 SERIES (SYSTEM CTL. SECTION)
E
D
C
B
A
1
2
3
4
5
6
7

NNECTION C.B.A. (VEP00M83A),
V SEPARATION C.B.A. (VEP00P62A)


REF. NO. 6900 SERIES
(FLYING ERASE SECTION)
(FOIL SIDE)
TEST POINT C.B.A. (VEP00N84A)
CTL
GND
SR PHOTO
GND
TP1
TP2
TP3
TP4
TP5 PB C
TP6 HEAD SW
TP7 RF
TP8 RF
TP9 GND
TEST POINT PCB
P1
P2
P3
P4
(COMPONENT SIDE)
SUB SYSTEM CONTROL C.B.A.
(VEP00P41A)
QR3
QR1
R1
R3
(FOIL SIDE)
SYNC EDIT
CONNECTION C.B.A.
(VEP00M83A)
SYNC EDIT JACK
P6751
(FOIL SIDE)
(1)
(5)
FE HEAD C.B.A.
(VEP00K88A)
P1502
Q1401
(FOIL SIDE)
TO FE HEAD
POCKET SW
CONNECTION C.B.A.
(VEP00M90A)
POCKET SW CN
P6351
P6352
(FOIL SIDE)
V SEPARATION
C.B.A.
(VEP00P62A)
C2
R1
R2
R3
(FOIL SIDE)
8
9
10
11

TEST POINT C.B.A.	
Connector	
P1	D-9
P2	D-9
P3	D-10
P4	D-10
Test Point	
TP1	E-10
TP2	E-10
TP3	E-10
TP4	E-10
TP5	E-9
TP6	E-10
TP7	E-10
TP8	E-10
TP9	E-10

ADDRESS INFORMATION

POCKET SW CONNECTION C.B.A.	
Connector	
P6351	A-10
P6352	A-10

ADDRESS INFORMATION

SYNC EDIT CONNECTION C.B.A.	
Connector	
P6751	C-10

ADDRESS INFORMATION

FE HEAD C.B.A.	
Transistor	
Q1401	B-11
Connector	
P1502	C-11

ADDRESS INFORMATION

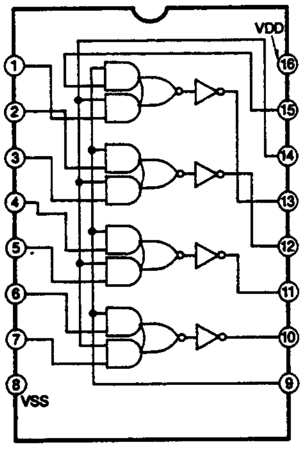
SERVO/SYSTEM CTL C.B.A.	
Transistor	
Q2001	B-2
Q2004	B-5
Q2005	D-3
Q2006	A-4
Q2007	A-4
Q2008	A-3
Q2009	C-4
Q2010	B-1
Q2011	A-3
Q6001	B-5
Q6002	B-6
Q6003	A-6
Q6004	A-6
Q6005	B-6
Q6006	A-7
Q6007	B-6
Q6008	A-1
Q6009	D-6
Q6010	C-8
Q6011	C-8
Q6012	D-6
Q6901	D-8
Q6902	E-8
Q6903	D-8
Q6904	E-8
Q6905	E-8
Q6906	D-9
Q6907	D-9
Transistor & Resistor	
QR1	
QR2	
QR3	
QR2001	D-2
QR2002	B-4
QR2003	A-4
QR2004	C-4
QR2005	B-5
QR2006	D-3
QR2201	E-5
QR2202	E-6
QR6001	D-6
QR6002	D-6
QR6003	B-8
QR6004	D-6
QR6005	D-6
QR6006	C-6
QR6007	C-6
QR6008	E-7
QR6009	B-5
QR6010	B-6
QR6011	A-7
QR6012	D-8
QR6013	C-8
QR6014	C-5
QR6015	B-6
QR6016	B-7
QR6017	D-7
QR6018	D-7
QR6019	D-6
QR6020	D-7
QR6021	D-7
QR6022	C-7
QR6023	D-7
QR6024	D-7
QR6025	C-5
QR6026	C-6
QR6027	C-8
QR6901	E-8
Integrated Circuit	
IC1	D-10
IC1	
IC2	
IC2001	C-3
IC2002	E-4
IC2003	B-4
IC2004	B-3
IC2005	C-4
IC2006	C-4
IC2007	A-3
IC2008	E-3
IC2009	D-2
IC2010	C-3
IC2011	A-2
IC2012	C-2
IC2201	E-6
IC6001	D-7
IC6002	C-6
IC6003	E-7
IC6004	C-5
IC6005	D-8
IC6006	C-8
IC6007	C-7
IC6008	B-6
IC6009	D-8
Test Point	
TP2001	D-3
TP2002	E-2
TP2003	B-4
TP2004	B-5
TP2005	B-5
TP2006	B-5
TP2007	B-4
TP2008	B-4
TP2009	B-4
TP2010	C-4
TP2011	C-4
TP2012	E-4
TP2013	C-2
TP2014	C-3
TP2201	D-4
TP2202	E-5
TP2203	D-5
TP2204	C-4
TP2205	C-4
TP6001	D-5
TP6002	D-5
TP6003	C-5
TP6004	C-6
TP6005	A-7
Adjustment	
VR2001	E-4
VR2002	D-4
VR2003	E-4
VR2004	E-4
VR2005	E-2
VR2006	D-4
VR2007	D-3
VR2008	E-4
Connector	
P1401	C-6
P2001	A-4
P2002	A-2
P2003	C-1
P2004	D-1
P2005	D-4
P2006	A-7
P2007	B-2
P2008	E-3
P2009	C-1
P6001	A-8
P6002	B-8
P6003	A-8
P6005	A-6
P6006	A-8
P6007	A-6
P6008	D-7
P6009	B-1
P6010	A-7
P6011	D-6
P6012	A-5
P6013	C-8
P6014	C-8
P6015	B-8
P6017	B-7
P6901	E-8

ADDRESS INFORMATION

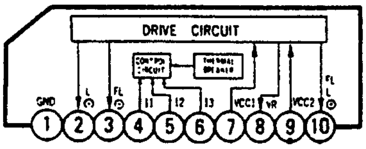
SYSTEM CONTROL ICs DC VOLTAGE CHART

REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0	0	5.1	0	4.5	5.1	0	4.5	0	5.0	5.1	0	0	5.1						
REC	2.5	0	5.1	1.7	2.8	5.1	0	2.7	5.1	1.6	5.1	0	0	5.1						
FF	0	0	5.1	2.1	2.7	5.1	0	2.6	5.1	2.0	5.1	0	0	5.1						
REF. NO.	IC6002																			
MODE	1	2	3																	
STOP	5.1	5.1	0																	
REC	5.0	5.0	0																	
FF	5.0	5.0	0																	
REF. NO.	IC6003																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0	0	5.1	5.0	2.1	0	2.0	0	2.5	0	2.5	0	4.7	4.7						
REC	2.6	2.6	5.1	2.7	2.3	0	2.2	0	2.2	2.8	2.3	0	2.8	2.8						
FF	2.2	2.2	5.1	2.6	2.3	0	2.2	0	2.2	2.7	2.3	0	2.0	2.1						
REF. NO.	IC6004																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	5.1	0	5.1	5.1	0	0	5.1	5.1	0	5.1	4.6	5.1	0	0	0	5.1	5.1	0	0	5.1
REC	0	5.1	0	0.1	0.1	0	0	0	0	5.1	4.6	5.1	0	0	0	0	0	0	0	0
FF	5.1	5.0	5.1	5.1	0	0	5.1	0	0	5.1	4.7	5.1	0	0	0	5.1	5.1	0	0	5.1
REF. NO.	IC6004																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	5.1	0	0	5.1	0	0	0	0.1	0.1	0	0	0	4.7	0	0	0.5	4.5	5.1	2.7	—
REC	0	0	0	5.0	0	0	0	0.1	0.1	0	0	0	2.8	2.5	2.4	2.4	2.4	5.1	2.7	—
FF	5.1	0	0	5.0	0	0	0	0.1	0.1	0	0	0	2.1	2.2	2.4	2.2	2.6	1.5	2.7	—
REF. NO.	IC6004																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	1.4	1.4	1.0	1.0	4.1	5.1	5.1	5.1	5.1	5.1	5.0	4.9	0	4.9	4.6	0.5	4.1	0	0
REC	0	1.5	1.5	0	1.1	5.1	5.1	5.1	5.1	5.1	5.0	5.0	4.9	0	4.9	4.6	0.5	4.0	0	0
FF	0	1.5	1.5	1.1	1.1	4.0	5.1	5.1	5.1	5.1	5.1	5.0	4.9	0	4.9	4.6	0.6	4.0	0	0
REF. NO.	IC6004																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76				
STOP	0	0	0	4.9	0	5.1	5.1	2.6	0.6	5.0	5.0	5.1	5.1	5.1	5.1	5.1				
REC	0	0	0	4.9	0	5.1	5.1	2.5	0.6	—	5.0	5.1	5.1	5.1	0	5.1				
FF	0	0	0	4.9	0	5.1	5.1	2.5	0.6	5.0	5.0	5.1	5.1	5.1	5.1	5.1				
REF. NO.	IC6005																			
MODE	1	2	3	4	5	6	7	8	9	10										
STOP	0	0.2	0.2	0	0	0	12.3	10.2	12.0	0.2										
REC	0	0.2	0.2	0	0	0	12.3	10.2	12.0	0.2										
FF	0	0.2	0.2	0	0	0	12.3	10.2	12.0	0.2										
REF. NO.	IC6006																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0	5.1	0.5	0	5.1	5.1	5.1	0	1.1	5.1	4.0	1.1	1.0	4.1	5.1	5.1				
REC	0	5.1	0.5	5.1	5.1	5.1	5.1	0	1.1	5.1	5.1	1.1	0	4.0	0	5.1				
FF	0	5.1	0.5	0	5.1	5.1	5.1	0	1.0	5.1	3.9	1.1	1.1	4.0	5.1	5.1				
REF. NO.	IC6007																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	0	1.1	5.1	5.1	1.1	0	0	5.1	4.0	1.1	1.1	4.1	5.1	5.1						
REC	0	1.1	5.1	5.1	1.1	0	0	5.1	4.0	1.1	1.1	4.0	5.1	5.1						
FF	0	1.1	5.1	5.1	1.1	0	0	5.1	4.0	1.1	1.1	4.0	5.0	5.1						
REF. NO.	IC6008										IC6009									
MODE	1	2	3	4	5	6	7	8			I	G	O							
STOP	5.1	0	0.7	0	0	2.9	0	5.1			13.5	0	12.0							
REC	5.1	0	0.7	0	0	2.9	0	5.1			13.4	0	12.0							
FF	1.4	1.1	0.7	0	1.1	2.9	0	5.1			13.4	0	12.0							

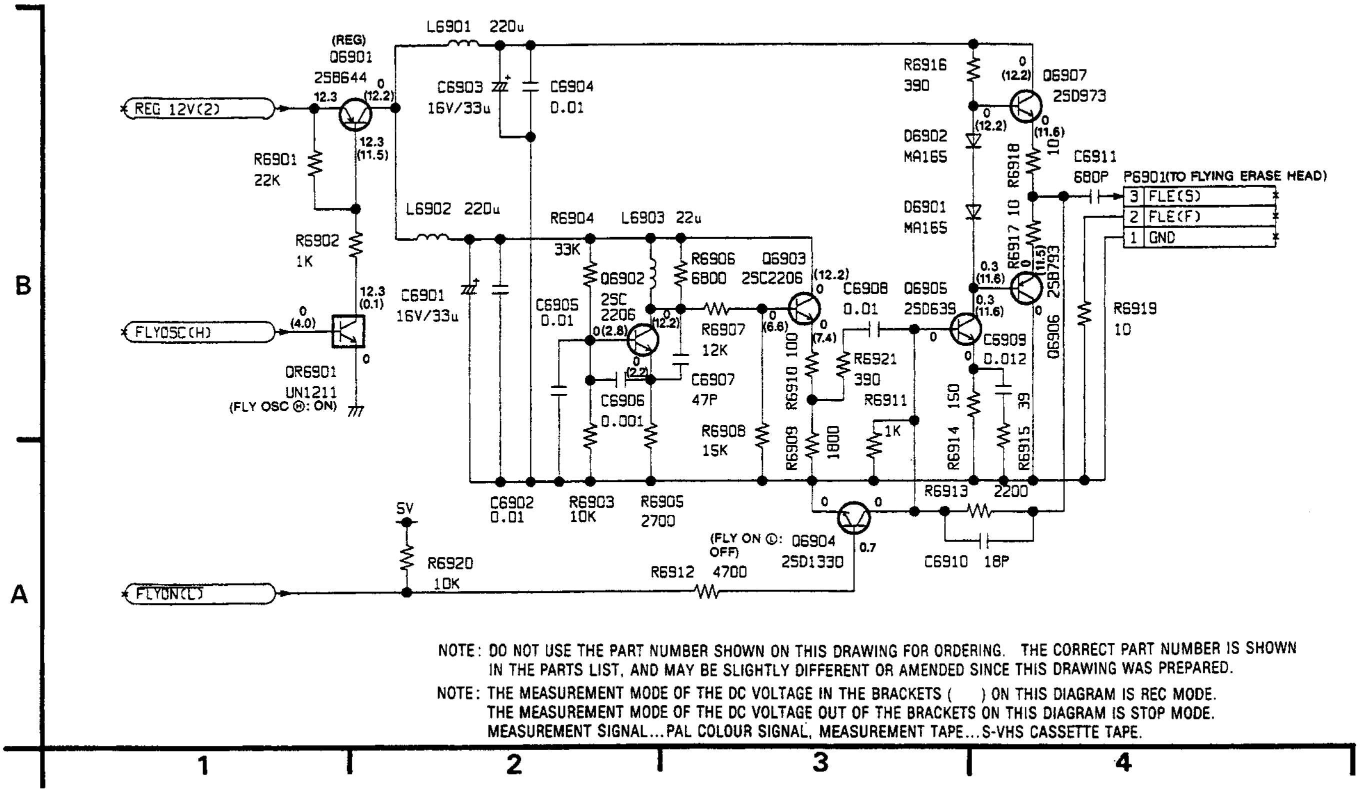
IC6006 MN4019B



IC6005 M54649L



SYSTEM CONTROL (FLYING ERASE SECTION) SCHEMATIC DIAGRAM


REG 12V(2)
FLYOSC(H)
FLYON(L)
(REG) Q6901 2SB644
R6901 22K
R6902 1K
QR6901 UN1211
(FLY OSC Ⓗ: ON)
L6901 220u
C6903 16V/33u
C6904 0.01
L6902 220u
C6901 16V/33u
C6902 0.01
R6904 33K
L6903 22u
C6905 0.01
Q6902 2SC 2206
C6906 0.001
R6903 10K
R6905 2700
R6906 6800
R6907 12K
C6907 47P
R6908 15K
Q6903 2SC2206
R6910 100
R6909 1800
R6921 390
R6911 1K
C6908 0.01
Q6905 2SD639
C6909 0.012
R6914 150
R6915 39
R6913 2200
C6910 18P
(FLY ON Ⓛ: OFF) Q6904 2SD1330
R6912 4700
5V
R6920 10K
R6916 390
D6902 MA165
D6901 MA165
Q6907 2SD973
R6918 10
R6917 10
Q6906 2SB793
C6911 680P
R6919 10
P6901(TO FLYING ERASE HEAD)
3 FLE(S)
2 FLE(F)
1 GND
12.3
(12.2)
(11.5)
(0.1)
(4.0)
(2.8)
(2.2)
(6.6)
(7.4)
(11.6)
0.3
0.7
A
B
1
2
3
4

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS REC MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE.
MEASUREMENT SIGNAL...PAL COLOUR SIGNAL, MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

SYSTEM CONTROL TRs DC VOLTAGE CHART

REF. NO.	Q6001			Q6002			Q6003			Q6004			Q6005			Q6006		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0.6	11.6	0.5	11.1	0	11.6	11.6	0	11.1	0	0	0	0	0	0	0	5.1	0
REC	0.6	11.6	0.5	11.1	0	11.6	11.6	0	11.1	0	0	0	0	0	0	0	5.1	0
FF	0.6	11.6	0.4	11.1	0	11.6	11.6	0	11.1	0	0	0	0	0	0	0	5.1	0
REF. NO.	Q6007			Q6008			Q6009			Q6010			Q6011			Q6012		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	2.5	0.1	11.6	12.3	12.2	5.1	5.1	4.5	0.6	0.6	1.2	0.6	—	—	0	0	0
REC	0	0	0.4	11.6	12.3	12.2	5.1	5.1	4.5	0.6	0.6	1.2	0.6	1.2	0.4	0	0.2	0
FF	0	0.6	0.4	11.6	12.3	12.2	5.1	5.1	4.5	0.6	0.6	1.2	0.6	1.2	0.4	0	0.1	0
REF. NO.	QR6001			QR6002			QR6003			QR6004			QR6005			QR6006		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	12.3	0	0	0	5.1	0	4.3	0	0	11.9	0	0	0	5.1	0	5.9	0
REC	0	0.1	3.5	0	3.5	0	0	2.1	2.4	0	0	4.0	0	4.0	0	0	6.0	0
FF	0	12.3	0	0	0	5.1	0	2.4	2.7	0	11.9	0	0	0	5.1	0	5.9	0
REF. NO.	QR6007			QR6008			QR6009			QR6010			QR6011			QR6012		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	0.1	1.9	5.1	5.1	0	5.1	0.5	4.6	0	11.6	0	5.1	0	5.1	0	10.2	0
REC	0	0.1	1.9	5.1	5.1	0	5.1	0.4	4.6	0	11.6	0	5.1	0	5.1	0	10.2	0
FF	0	0.1	1.8	5.1	5.1	0	5.1	0.4	4.7	0	11.6	0	5.1	0	5.1	0	10.2	0
REF. NO.	QR6013			QR6014			QR6015			QR6016			QR6017			QR6018		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	1.0	4.0	0	4.6	0.4	0	2.5	0	0	5.1	0	0	0	0.6	0	0	0.6
REC	0	1.1	4.0	0	4.6	0.5	0	0	4.0	0	5.1	0	0	2.8	0.6	0	0	0.6
FF	0	1.1	4.0	0	4.6	0.4	0	0.6	0	0	5.1	0	0	2.8	0.6	0	2.6	0.6
REF. NO.	QR6019			QR6020			QR6021			QR6022			QR6023			QR6024		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	12.3	0.3	12.3	5.1	0	5.0	0	5.0	0.6	0	0	5.1	0	0	5.1	0	0	5.1
REC	12.3	12.0	0.1	5.1	0	5.0	0	5.0	0.6	0	5.1	0	0	0	5.1	0	0	5.1
FF	12.3	0.3	12.3	5.1	0	5.0	0	5.0	0.6	0	5.1	0	0	0	5.1	0	0	5.1
REF. NO.	QR6025			QR6026														
MODE	E	C	B	E	C	B												
STOP	5.1	0	5.1	0	0.1	1.9												
REC	5.1	4.5	5.1	0	0.1	1.9												
FF	5.1	0	5.1	0	0.1	1.8												

SYSTEM CONTROL SCHEMATIC DIAGRAM

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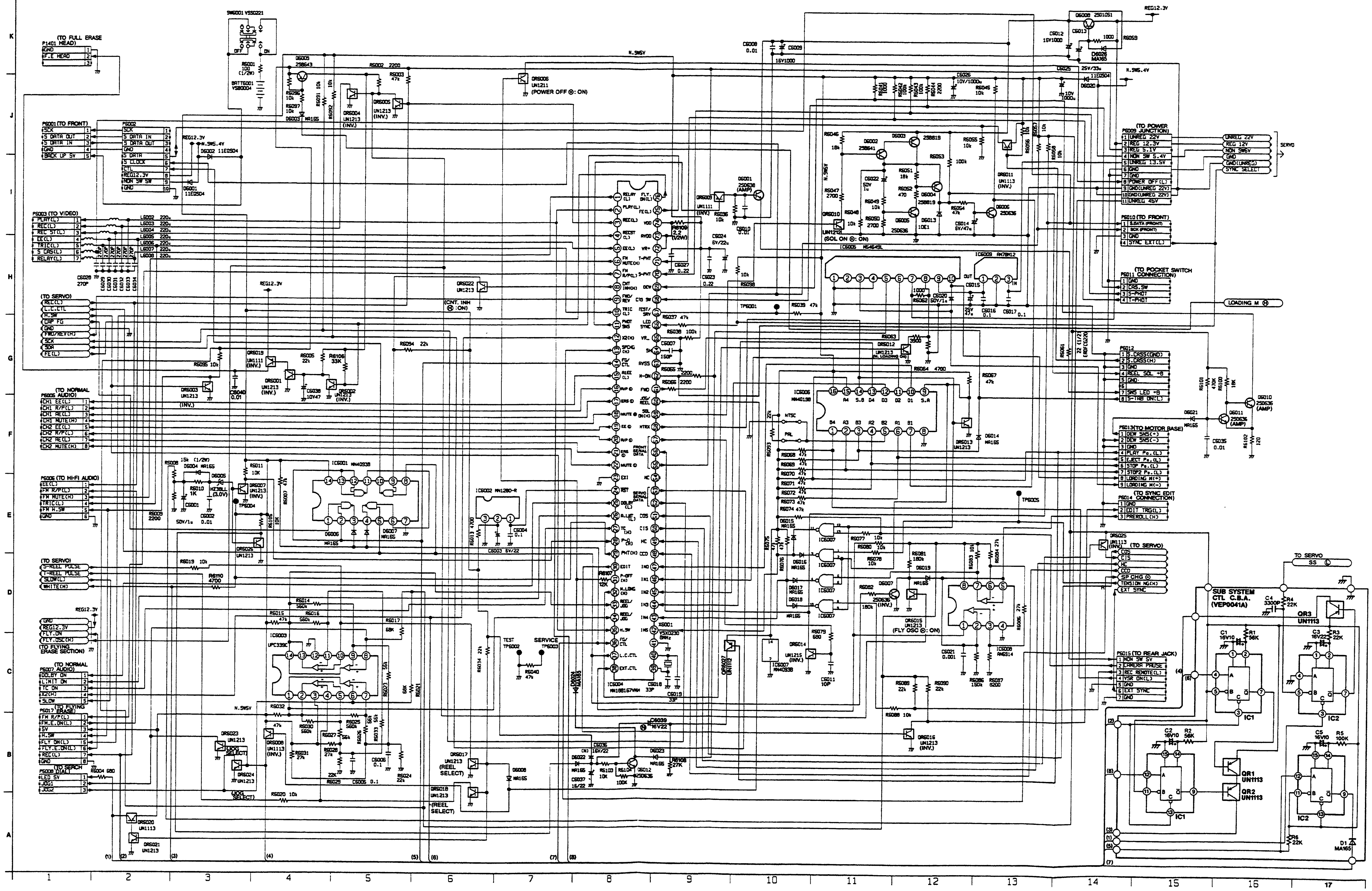


K
J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
(TO FULL ERASE HEAD)
P1401
P6001 (TO FRONT)
P6002
P6003 (TO VIDEO)
(TO SERVO)
(TO NORMAL AUDIO)
P6005
P6006 (TO HI-FI AUDIO)
(TO FLYING ERASE SECTION)
(TO NORMAL AUDIO)
P6007
(TO FLYING ERASE)
P6008
(TO SEARCH DIAL)
SW6001 VSS0221
BATT6001
IC6001 MN4093B
IC6002 MN1280-R
IC6003 UPC339C
IC6004 MN1B8167VNH
IC6005 MN4640L
IC6006 MN4019B
IC6007 MN4093B
IC6008 AN6514
IC6009 AN78M12
QR6006 UN1211 (POWER OFF ⓗ: ON)
(CNT. INH ⓗ: ON)
(SOL ON ⓗ: ON)
(FLY OSC ⓗ: ON)
TEST TP6002
SERVICE TP6003
TP6001
TP6005
X6001 VSXC0230 8MHz
REG12.3V
N.5V5V
N.5V5.4V
P6009 (TO POWER JUNCTION)
UNREG 22V
REG 12.3V
REG 5.1V
NON SW 5.4V
UNREG 13.5V
GND
POWER OFF(L)
GND(UNREG 22V)
UNREG 45V
SERVO
P6010 (TO FRONT)
SYNC EXT(L)
P6011 (TO POCKET SWITCH CONNECTION)
LOADING M Ⓗ
P6012
P6013 (TO MOTOR BASE)
P6014 (TO SYNC EDIT CONNECTION)
(TO SERVO)
TO SERVO
SS Ⓛ
P6015 (TO REAR JACK)
SUB SYSTEM CTL C.B.A. (VEP0041A)
QR1 UN1113
QR2 UN1113
QR3 UN1113
IC1
IC2
D1 MA165

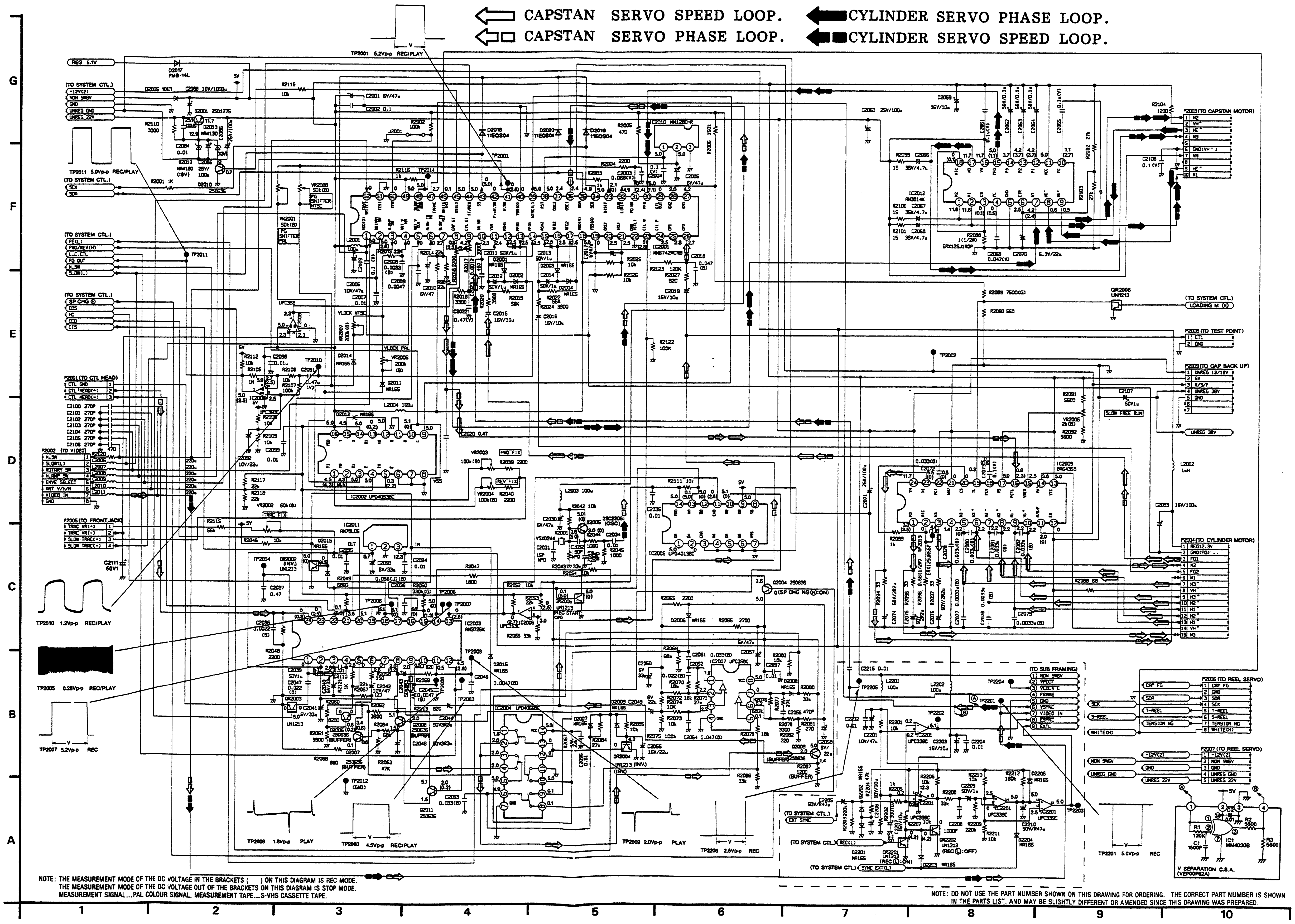
SERVO
SUB FRAMING

SYSTEM CTL.

SERVO
SUB FRAMING

SYSTEM CTL.

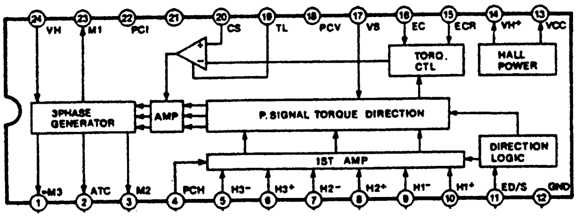
SERVO SCHEMATIC DIAGRAM


CAPSTAN SERVO SPEED LOOP.
CAPSTAN SERVO PHASE LOOP.
CYLINDER SERVO PHASE LOOP.
CYLINDER SERVO SPEED LOOP.
TP2001 5.2Vp-p REC/PLAY
REG 5.1V
(TO SYSTEM CTL.)
TP2011 5.0Vp-p REC/PLAY
P2001 (TO CTL HEAD)
P2002 (TO VIDEO)
P2005 (TO FRONT JACK)
TP2010 1.2Vp-p REC/PLAY
TP2005 0.28Vp-p REC/PLAY
TP2007 5.2Vp-p REC
TP2008 1.8Vp-p PLAY
TP2003 4.5Vp-p REC/PLAY
TP2009 2.0Vp-p PLAY
TP2205 2.5Vp-p REC
TP2201 5.0Vp-p REC
P2003 (TO CAPSTAN MOTOR)
P2008 (TO TEST POINT)
P2009 (TO CAP BACK UP)
P2004 (TO CYLINDER MOTOR)
P2006 (TO REEL SERVO)
P2007 (TO REEL SERVO)
(TO SUB FRAMING)
V SEPARATION C.B.A. (VEP00P82A)
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

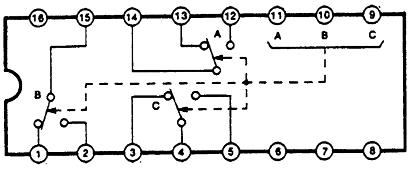
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS REC MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE.
MEASUREMENT SIGNAL...PAL COLOUR SIGNAL. MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

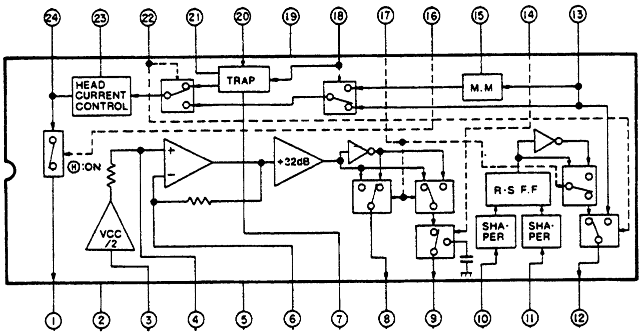
IC2009 BA6435S


VH
M1
PCI
CS
TL
PCV
VS
EC
ECR
VH+
VCC
TORQ. CTL
HALL POWER
3PHASE GENERATOR
AMP
P. SIGNAL TORQUE DIRECTION
1ST AMP
DIRECTION LOGIC
M3
ATC
M2
PCH
H3-
H3+
H2-
H2+
H1-
H1+
ED/S
GND

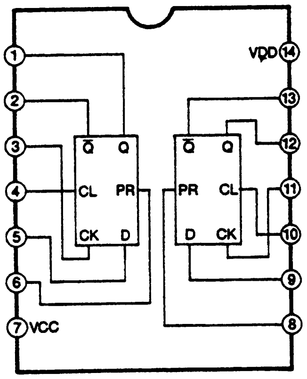
IC2002 µPD4053BC



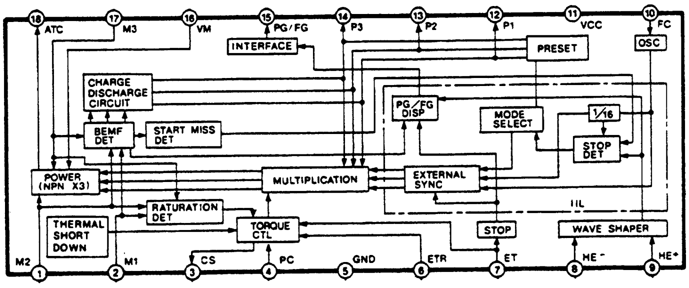
IC2003 AN3726K


HEAD CURRENT CONTROL
TRAP
M.M
H:ON
+22dB
R·S F.F
SHA-PER
SHA-PER
VCC/2

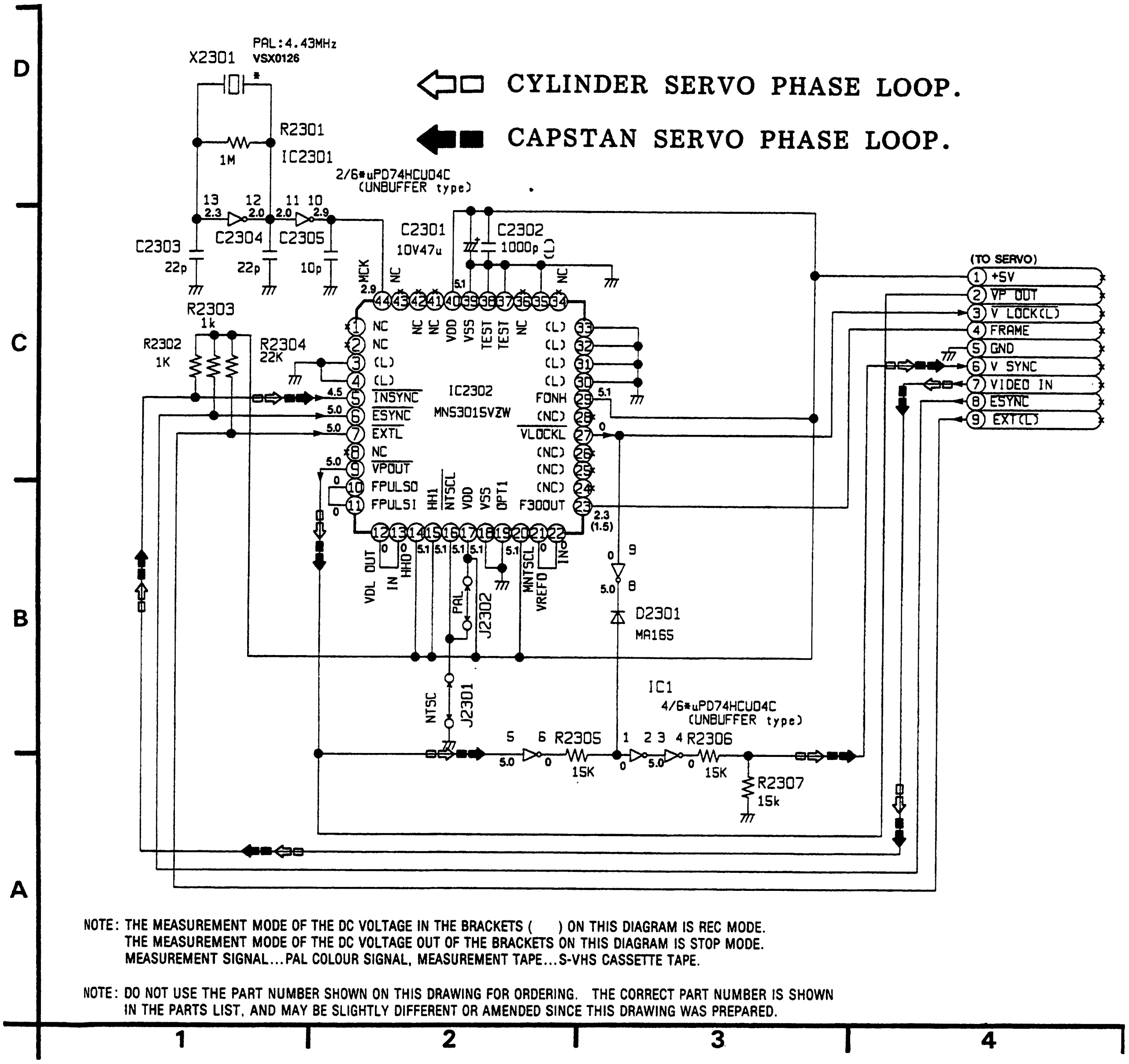
IC2005 µPD4013BC


VDD
Q̄
Q
CL
PR
CK
D
Q̄
Q
PR
CL
D
CK
VCC

IC2012 AN3814K


ATC
M3
VM
PG/FG
P3
P2
P1
VCC
FC
INTERFACE
PRESET
OSC
CHARGE DISCHARGE CIRCUIT
BEMF DET
START MISS DET
PG/FG DISP
MODE SELECT
1/16
STOP DET
POWER (NPN X3)
MULTIPLICATION
EXTERNAL SYNC
IIL
RATURATION DET
THERMAL SHORT DOWN
TORQUE CTL
STOP
WAVE SHAPER
M2
M1
CS
PC
GND
ETR
ET
HE-
HE+

SUB FRAMING SCHEMATIC DIAGRAM

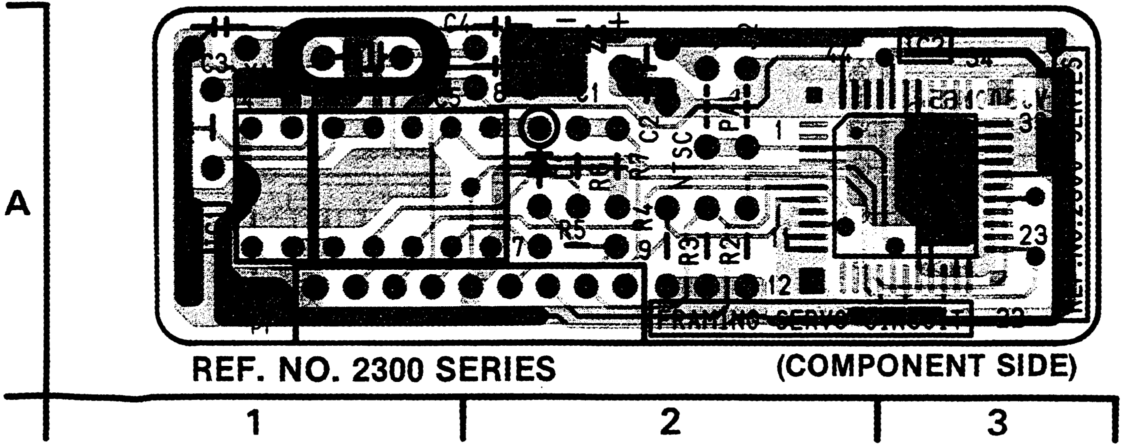

D
C
B
A
1
2
3
4
X2301
PAL:4.43MHz
VSX0126
R2301
1M
IC2301
2/6*uPD74HCU04C
(UNBUFFER type)
C2303
22p
C2304
22p
C2305
10p
R2303
1k
R2302
1K
R2304
22K
CYLINDER SERVO PHASE LOOP.
CAPSTAN SERVO PHASE LOOP.
C2301
10V47u
C2302
1000p
IC2302
MN53015VZW
NC
(L)
INSYNC
ESYNC
EXTL
VPOUT
FPULS0
FPULS1
MCK
VDD
VSS
TEST
FONH
(NC)
VLOCKL
F300UT
VDL
OUT
IN
HH0
HH1
NTSCL
OPT1
MNTSCL
VREFO
PAL
NTSC
J2302
J2301
D2301
MA165
IC1
4/6*uPD74HCU04C
(UNBUFFER type)
R2305
15K
R2306
15K
R2307
15k
(TO SERVO)
1 +5V
2 VP OUT
3 V LOCK(L)
4 FRAME
5 GND
6 V SYNC
7 VIDEO IN
8 ESYNC
9 EXT(L)

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS REC MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE.
MEASUREMENT SIGNAL...PAL COLOUR SIGNAL, MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

SUB FRAMING C.B.A. (VEP00M65A)

SUB FRAMING C.B.A. (VEP00M65A)


A
1
2
3
NTSC
PAL
R5
R4
R3
R2
12
23
33
34
FRAMING SERVO CIRCUIT
P1

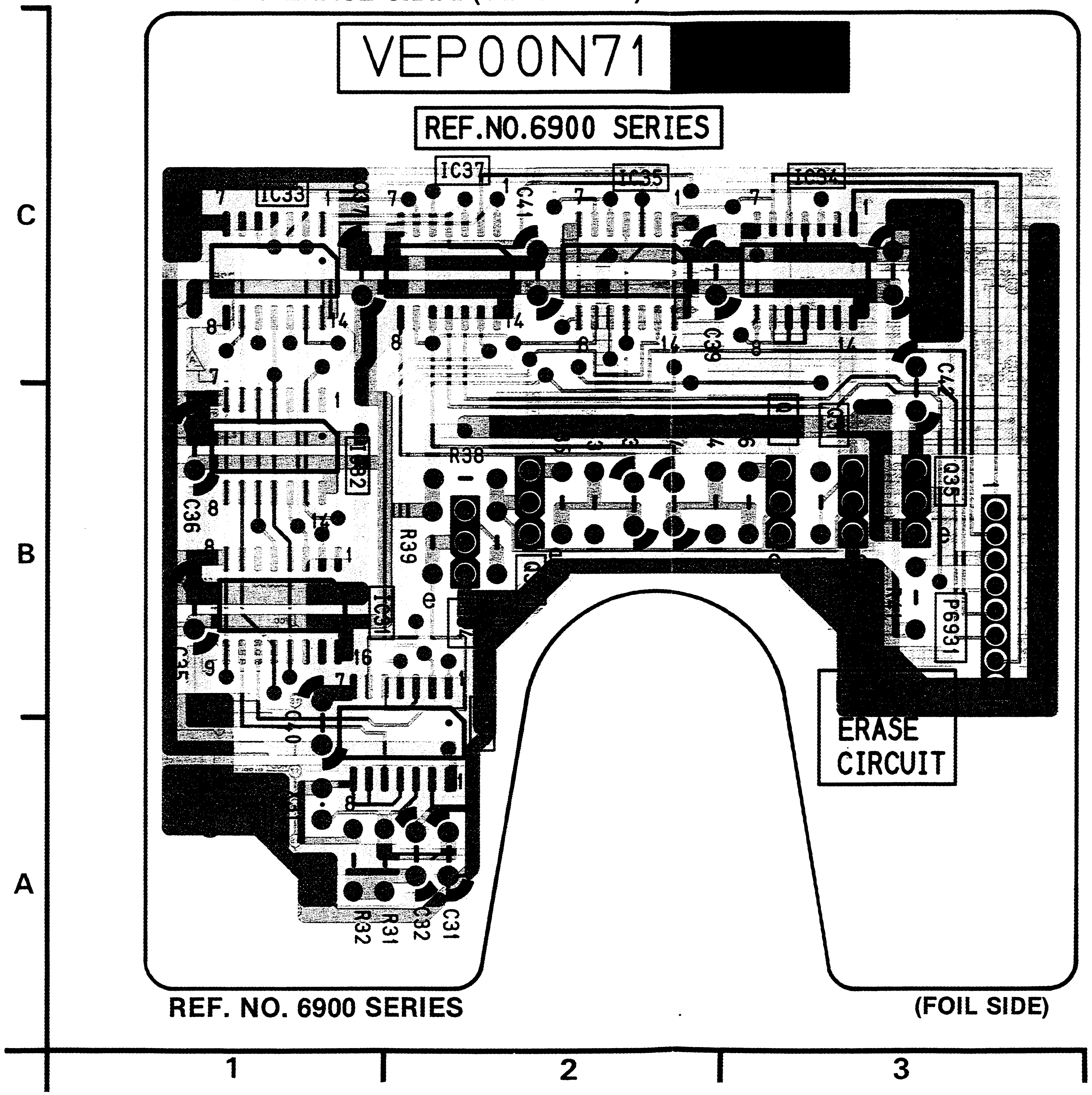
REF. NO. 2300 SERIES (COMPONENT SIDE)

SUB FRAMING C.B.A.	
Integrated Circuit	
IC2301	A-1
IC2302	A-3
Connector	
P2301	A-1

ADDRESS INFORMATION

FLYING ERASE C.B.A. (VEP00N71A)

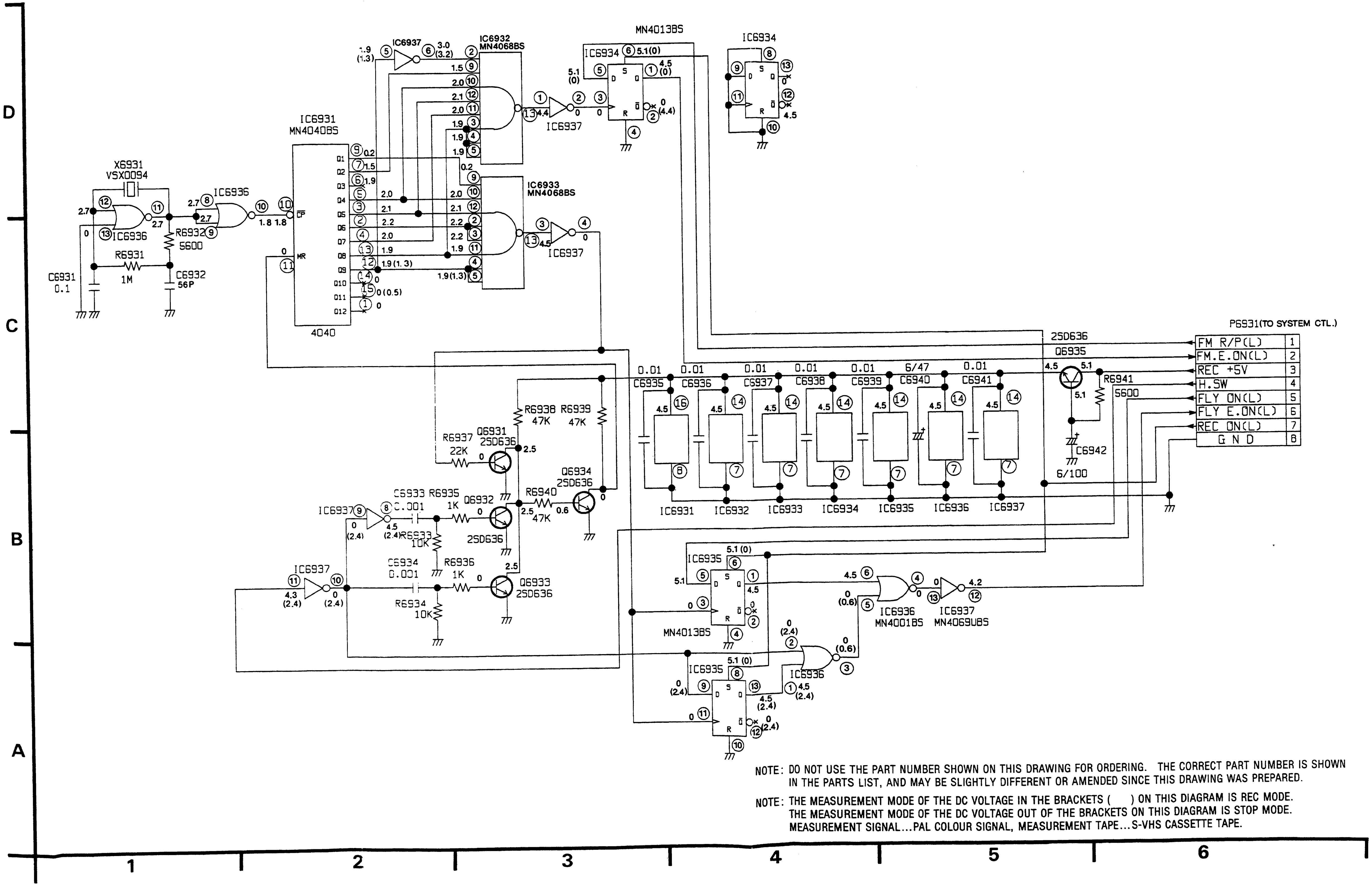
FLYING ERASE C.B.A. (VEP00N71A)


VEP00N71
REF.NO.6900 SERIES
IC37
IC33
IC35
IC34
C37
C41
C39
C42
IC32
R38
Q35
C36
R39
IC31
P6931
C35
C40
ERASE
CIRCUIT
C31
C32
R31
R32
C
B
A
1
2
3
REF. NO. 6900 SERIES
(FOIL SIDE)

FLYING ERASE C.B.A.	
Transistor	
Q6931	B-3
Q6932	B-2
Q6933	B-3
Q6934	B-2
Q6935	B-3
Integrated Circuit	
IC6931	B-1
IC6932	B-1
IC6933	C-1
IC6934	C-3
IC6935	C-2
IC6936	A-2
IC6937	C-2
Connector	
P6931	B-3

ADDRESS INFORMATION

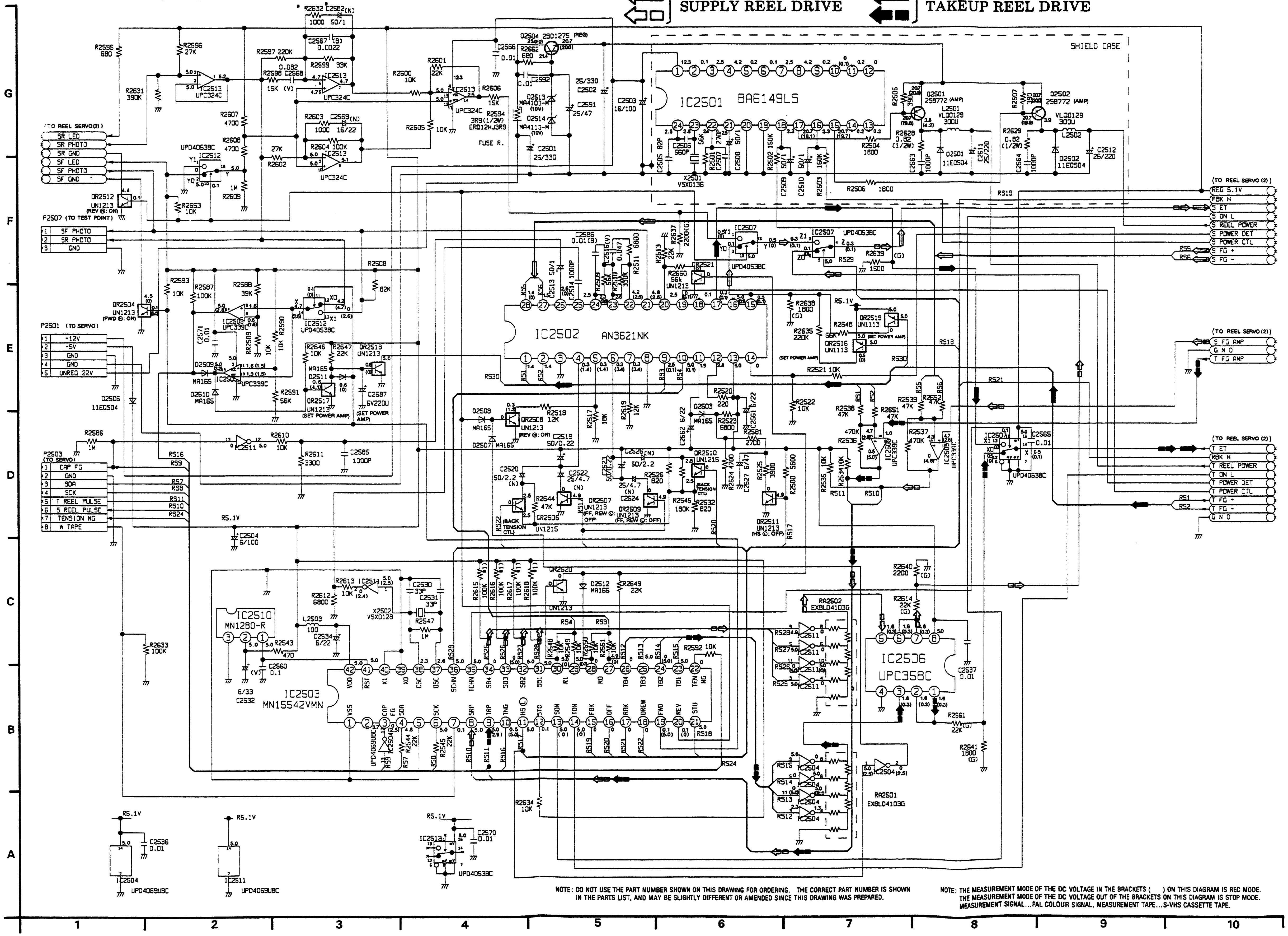
FLYING ERASE SCHEMATIC DIAGRAM


D
C
B
A
1
2
3
4
5
6
X6931
VSX0094
IC6936
R6932
5600
R6931
1M
C6931
0.1
C6932
56P
IC6931
MN4040BS
4040
IC6937
IC6932
MN4068BS
IC6933
MN4068BS
MN4013BS
IC6934
P6931(TO SYSTEM CTL.)
FM R/P(L)
FM.E.ON(L)
REC +5V
H.SW
FLY ON(L)
FLY E.ON(L)
REC ON(L)
G N D
2SD636
Q6935
R6941
5600
C6942
6/100
C6935
C6936
C6937
C6938
C6939
C6940
C6941
0.01
6/47
IC6932
IC6933
IC6934
IC6935
R6938
47K
R6939
47K
R6937
22K
Q6931
2SD636
Q6934
2SD636
C6933
0.001
R6935
1K
Q6932
2SD636
R6940
47K
R6933
10K
C6934
0.001
R6936
1K
R6934
10K
Q6933
2SD636
IC6935
MN4013BS
IC6936
MN4001BS
IC6937
MN4069UBS

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS REC MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE.
MEASUREMENT SIGNAL...PAL COLOUR SIGNAL, MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

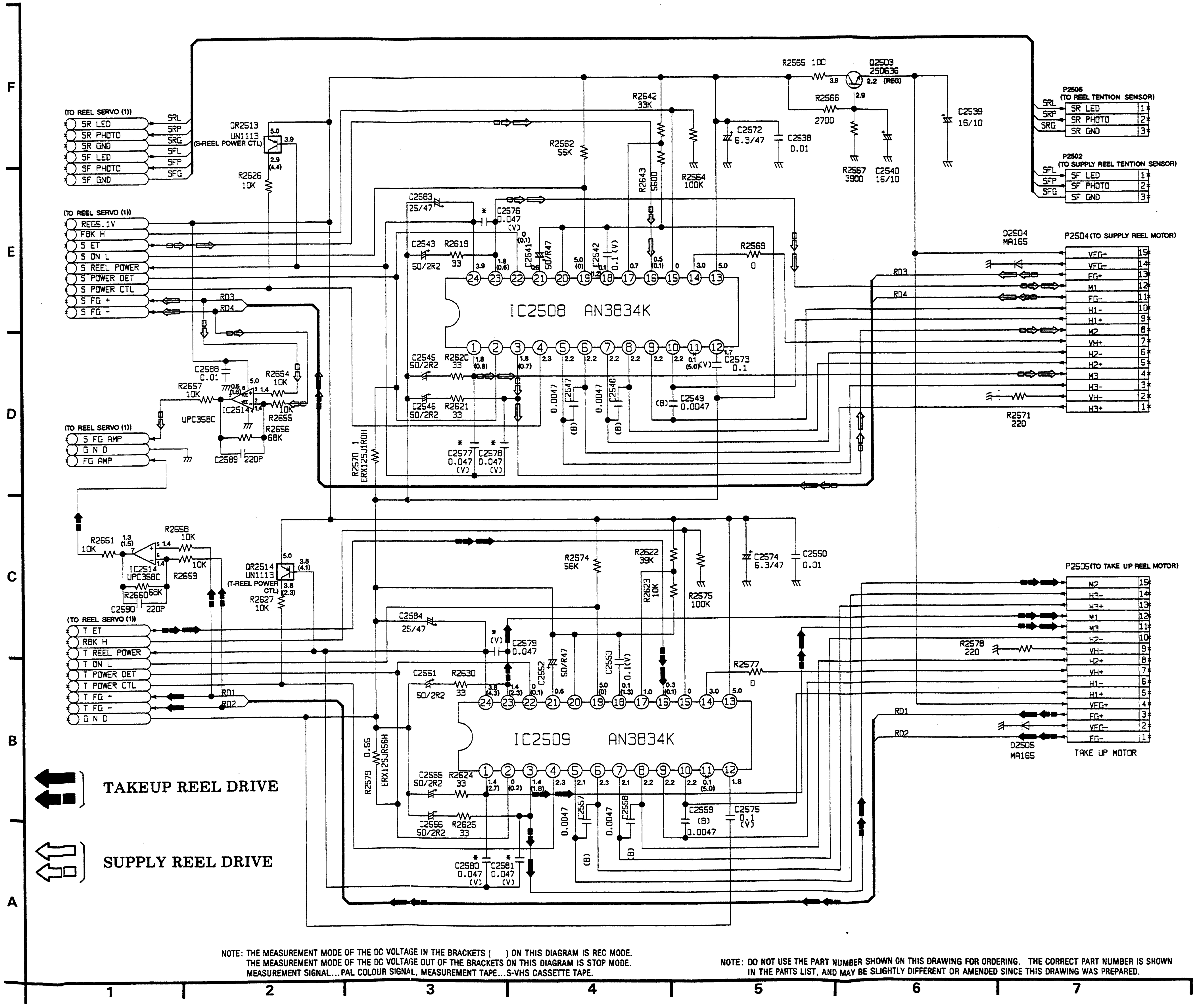
REEL SERVO (1/2) SCHEMATIC DIAGRAM


SUPPLY REEL DRIVE
TAKEUP REEL DRIVE
SHIELD CASE
IC2501 BA6149LS
IC2502 AN3621NK
IC2503 MN15542VMN
IC2506 UPC358C
IC2510 MN1280-R
IC2504 UPD4069UBC
IC2511 UPD4069UBC
IC2507 UPD4053BC
IC2512 UPD4053BC
IC2513 UPC324C
IC2509 UPC339C
Q2501 2SB772 (AMP)
Q2502 2SB772 (AMP)
Q2504 2SD1275 (REG)
X2501 VSX0136
X2502 VSX0128
RA2501 EXBL04103G
RA2502 EXBL04103G
FUSE R.
(TO REEL SERVO(2))
SR LED
SR PHOTO
SR GND
SF LED
SF PHOTO
SF GND
P2507 (TO TEST POINT)
SF PHOTO
SR PHOTO
GND
P2501 (TO SERVO)
+12V
+5V
GND
GND
UNREG 22V
P2503 (TO SERVO)
CAP FG
GND
SDA
SCK
T REEL PULSE
S REEL PULSE
TENSION NG
W TAPE
(TO REEL SERVO (2))
REG 5.1V
FBK H
S ET
S ON L
S REEL POWER
S POWER DET
S POWER CTL
S FG +
S FG -
(TO REEL SERVO (2))
S FG AMP
G N D
T FG AMP
(TO REEL SERVO (2))
T ET
RBK H
T REEL POWER
T ON L
T POWER DET
T POWER CTL
T FG +
T FG -
G N D
R5.1V
1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS REC MODE. THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE. MEASUREMENT SIGNAL...PAL COLOUR SIGNAL. MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

REEL SERVO (2/2) SCHEMATIC DIAGRAM

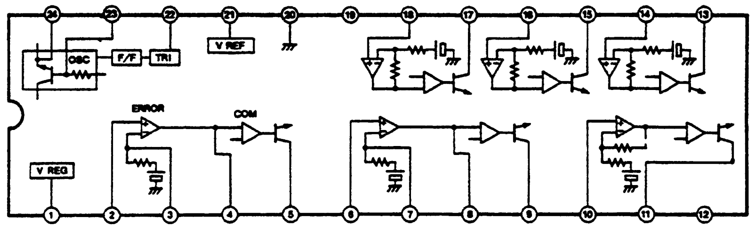


F
E
D
C
B
A
1
2
3
4
5
6
7
(TO REEL SERVO (1))
SR LED
SR PHOTO
SR GND
SF LED
SF PHOTO
SF GND
SRL
SRP
SRG
SFL
SFP
SFG
QR2513
UN1113
(S-REEL POWER CTL)
R2626
10K
REG5.1V
FBK H
S ET
S ON L
S REEL POWER
S POWER DET
S POWER CTL
S FG +
S FG -
RD3
RD4
C2588
0.01
R2657
10K
R2654
10K
IC2514
UPC358C
R2655
10K
R2656
68K
C2589
220P
S FG AMP
G N D
FG AMP
R2565 100
Q2503
2SD636
R2566
2700
R2642
33K
R2562
56K
R2643
5600
R2564
100K
C2572
6.3/47
C2538
0.01
R2567
3900
C2540
16/10
C2539
16/10
P2506
(TO REEL TENTION SENSOR)
P2502
(TO SUPPLY REEL TENTION SENSOR)
C2583
25/47
C2576
0.047
C2543
50/2R2
R2619
33
C2541
50/R47
C2542
0.1
R2569
0
IC2508 AN3834K
C2545
50/2R2
R2620
33
C2546
50/2R2
R2621
33
C2547
0.0047
C2548
0.0047
C2549
0.0047
C2573
0.1
C2577
0.047
C2578
0.047
R2570
ERX12SJ1R0H
D2504
MA165
P2504 (TO SUPPLY REEL MOTOR)
VFG+
VFG-
FG+
M1
FG-
H1-
H1+
M2
VH+
H2-
H2+
M3
H3-
VH-
H3+
R2571
220
R2661
10K
R2658
10K
R2659
IC2514
UPC358C
R2660
68K
C2590
220P
QR2514
UN1113
(T-REEL POWER CTL)
R2627
10K
T ET
RBK H
T REEL POWER
T ON L
T POWER DET
T POWER CTL
T FG +
T FG -
G N D
RD1
RD2
R2574
56K
R2622
39K
R2623
10K
R2575
100K
C2574
6.3/47
C2550
0.01
C2584
25/47
C2579
0.047
C2551
50/2R2
R2630
33
C2552
50/R47
C2553
0.1
R2577
0
IC2509 AN3834K
R2579 0.56
ERX12SJR56H
C2555
50/2R2
R2624
33
C2556
50/2R2
R2625
33
C2557
0.0047
C2558
0.0047
C2559
0.0047
C2575
0.1
C2580
0.047
C2581
0.047
P2505 (TO TAKE UP REEL MOTOR)
R2578
220
D2505
MA165
TAKE UP MOTOR
TAKEUP REEL DRIVE
SUPPLY REEL DRIVE

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS REC MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE.
MEASUREMENT SIGNAL...PAL COLOUR SIGNAL, MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

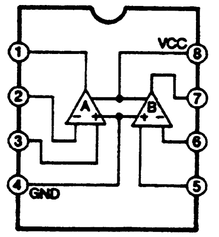
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

IC2501 BA6149LS

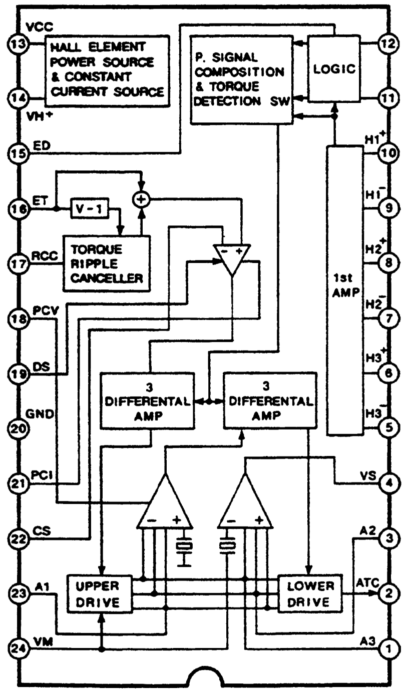


OSC
F/F
TRI
V REF
V REG
ERROR
COM

IC2506 µPC358C



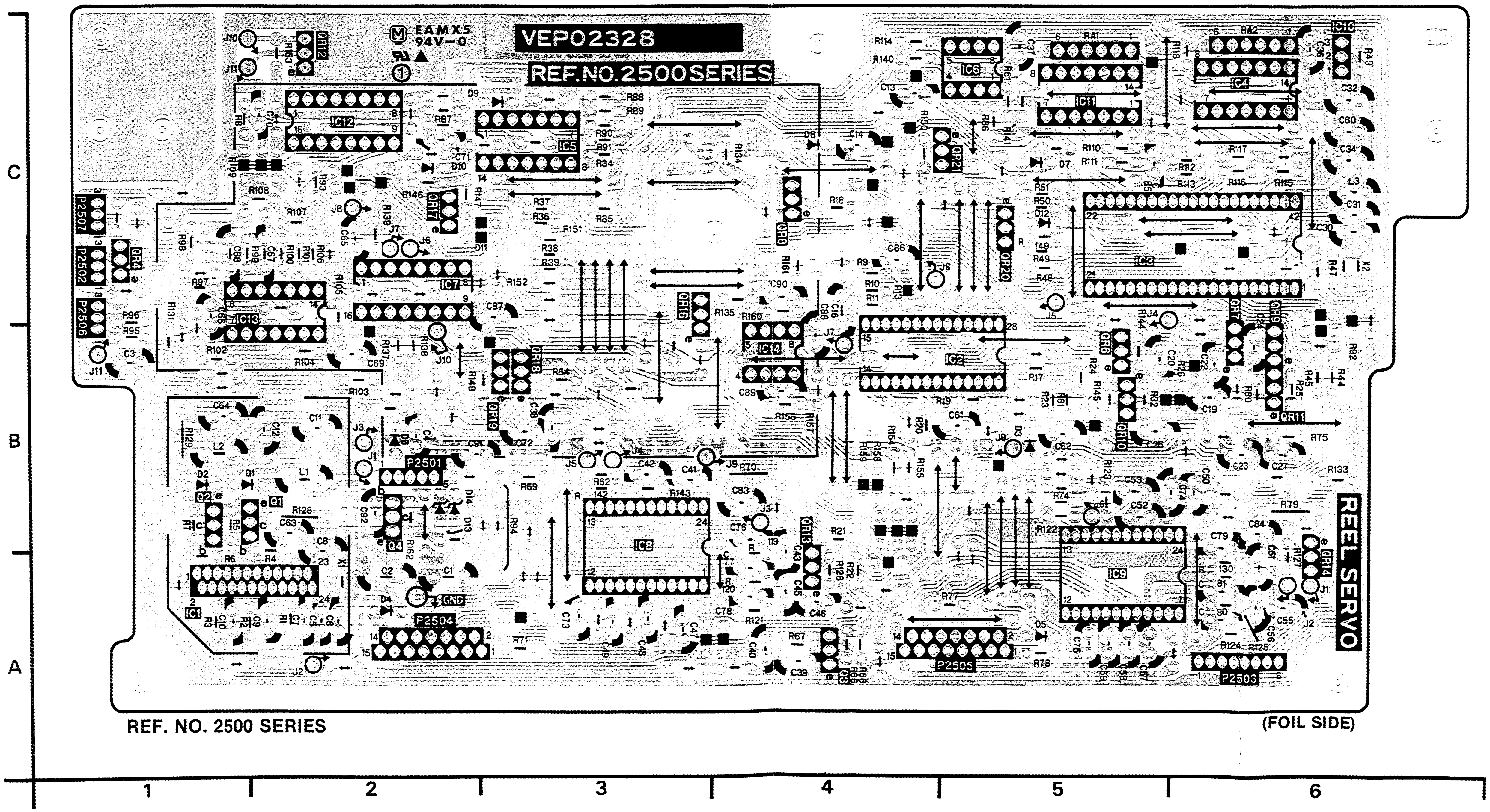
IC2509 AN3834K



VCC
HALL ELEMENT POWER SOURCE & CONSTANT CURRENT SOURCE
P. SIGNAL COMPOSITION & TORQUE DETECTION SW
LOGIC
VH+
ED
ET
V-I
RCC
TORQUE RIPPLE CANCELLER
PCV
DS
GND
PCI
CS
A1
VM
1st AMP
3 DIFFERENTAL AMP
3 DIFFERENTAL AMP
UPPER DRIVE
LOWER DRIVE
H1+
H1-
H2+
H2-
H3+
H3-
VS
A2
ATC
A3

REEL SERVO C.B.A. (VEP02328A)

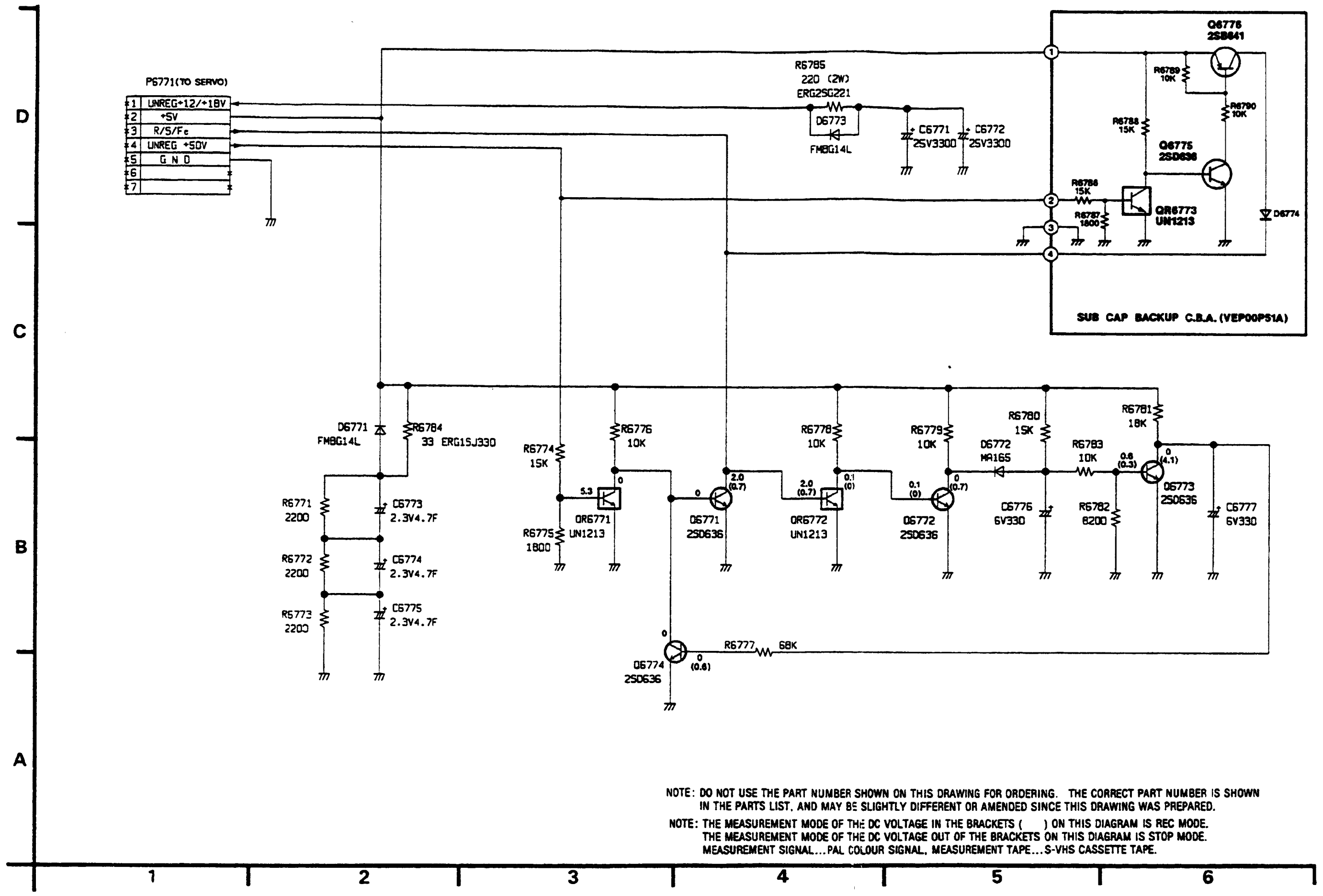
REEL SERVO C.B.A. (VEP02328A)


VEP02328
REF.NO.2500SERIES
EAMX5
94V-0
REEL SERVO
REF. NO. 2500 SERIES
(FOIL SIDE)
C
B
A
1
2
3
4
5
6

REEL SERVO C.B.A.	
Transistor	
Q2501	B-1
Q2502	B-1
Q2503	A-4
Q2504	A-2
Transistor & Resistor	
QR2504	C-1
QR2506	B-5
QR2507	B-6
QR2508	C-6
QR2509	B-6
QR2510	B-5
QR2511	B-6
QR2512	C-2
QR2513	A-4
QR2514	A-6
QR2516	C-3
QR2517	C-2
QR2518	B-3
QR2519	B-3
QR2520	C-5
QR2521	C-5
Integrated Circuit	
IC2501	A-1
IC2502	B-5
IC2053	C-5
IC2504	C-6
IC2505	C-3
IC2506	C-5
IC2507	C-2
IC2508	B-3
IC2509	A-5
IC2510	C-6
IC2511	C-5
IC2512	C-2
IC2513	C-2
IC2514	B-4
Connector	
P2501	B-2
P2502	C-1
P2503	A-6
P2504	A-2
P2505	A-5
P2506	C-1
P2507	C-1

ADDRESS INFORMATION

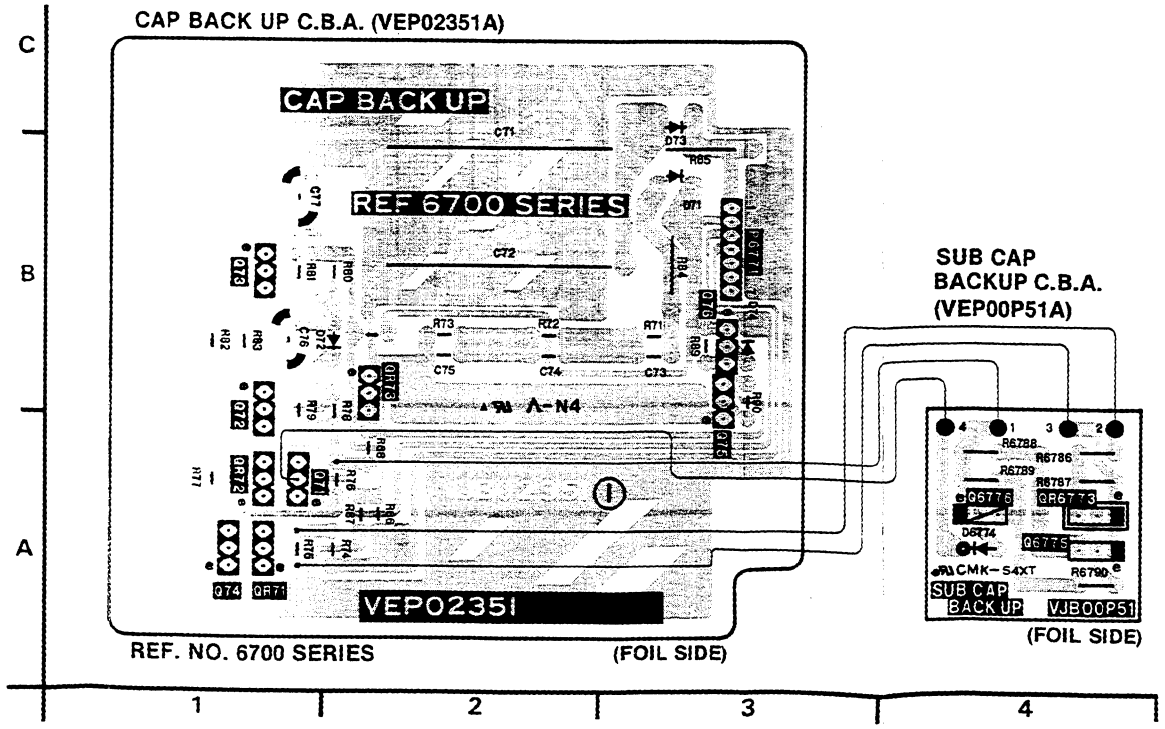
CAP BACKUP SCHEMATIC DIAGRAM


P6771(TO SERVO)
1 UNREG+12/+18V
2 +5V
3 R/S/Fc
4 UNREG +50V
5 GND
R6785
220 (2W)
ERG2SG221
D6773
FMBG14L
C6771
2SV3300
C6772
2SV3300
Q6776
2SB641
R6789
10K
R6790
10K
R6788
15K
Q6775
2SD636
R6786
15K
R6787
1800
QR6773
UN1213
D6774
SUB CAP BACKUP C.B.A. (VEP00P51A)
D6771
FMBG14L
R6784
33 ERG1SJ330
R6771
2200
R6772
2200
R5773
2200
C6773
2.3V4.7F
C6774
2.3V4.7F
C6775
2.3V4.7F
R6774
15K
R6775
1800
R6776
10K
QR6771
UN1213
Q6771
2SD636
R6778
10K
QR6772
UN1213
R6779
10K
Q6772
2SD636
D6772
MA165
R6780
15K
R6783
10K
R6781
18K
R6782
8200
C6776
6V330
Q6773
2SD636
C6777
6V330
Q6774
2SD636
R6777
68K
D
C
B
A
1
2
3
4
5
6

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS REC MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE.
MEASUREMENT SIGNAL...PAL COLOUR SIGNAL, MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

CAP BACKUP C.B.A. (VEP02351A) & SUB CAP BACKUP C.B.A. (VEP00P51A)


CAP BACK UP C.B.A. (VEP02351A)
CAP BACK UP
REF 6700 SERIES
VEP02351
SUB CAP BACKUP C.B.A. (VEP00P51A)
SUB CAP BACK UP
VJB00P51
CMK-S4XT
REF. NO. 6700 SERIES
(FOIL SIDE)
(FOIL SIDE)
C
B
A
1
2
3
4

CAP BACK UP C.B.A.	
Transistor	
Q6771	A-2
Q6772	A-1
Q6773	B-1
Q6774	A-1
Q6775	A-3
Q6776	B-3
Transistor & Resistor	
QR6771	A-1
QR6772	A-1
QR6773	B-2
Connector	
P6771	B-3

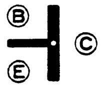
ADDRESS INFORMATION

Y/C NR PACK C.B.A. (VEP03615A)

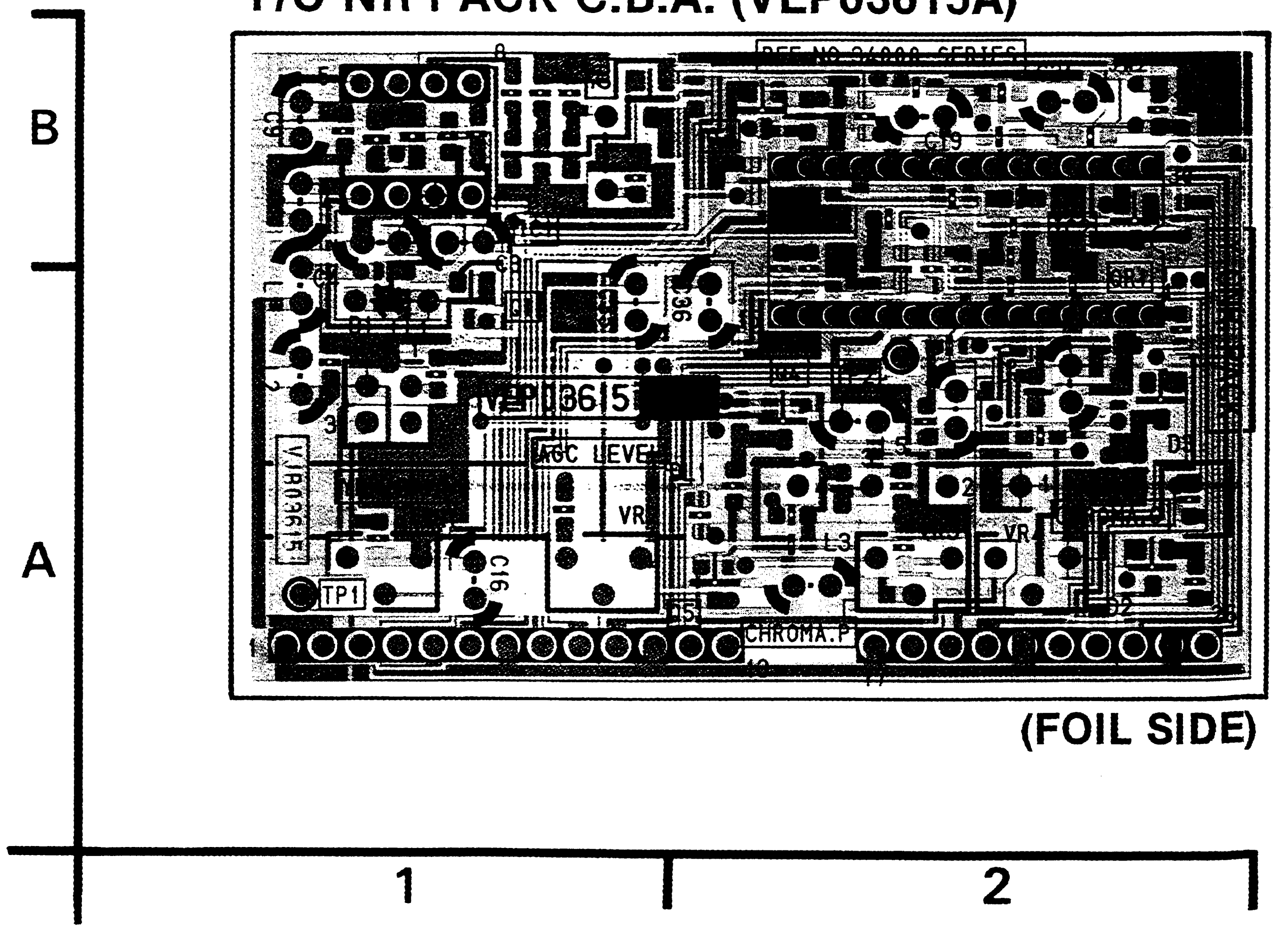
Y/C NR PACK C.B.A.	
Transistor	
Q34001	A-1
Q34002	B-1
Q34004	A-2
Q34005	A-1
Transistor & Resistor	
QR34001	B-2
Integrated Circuit	
IC34001	B-1
IC34002	B-2
Test Point	
TP34001	A-1
TP34002	A-2
Adjustment	
VR34001	A-1
VR34002	A-1
VR34003	A-2
VR34004	A-2

ADDRESS INFORMATION

TRANSISTOR INFORMATION



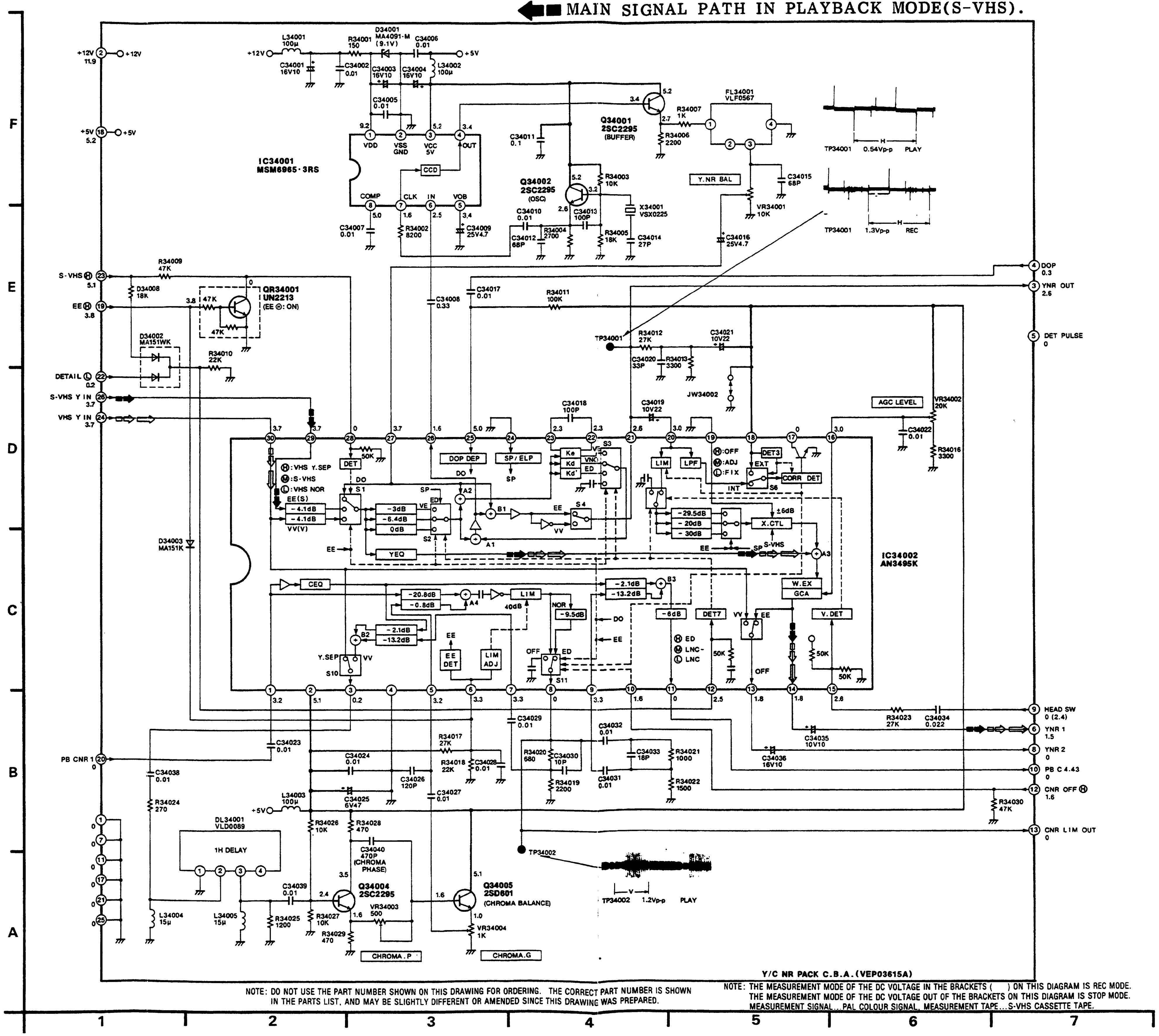
Y/C NR PACK C.B.A. (VEP03615A)


B
A
1
2
REF NO 34000 SERIES
VEP03615
AGC LEVEL
VR
V/A03615
TP1
C16
L3
CHROMA.P
C36
C19

(FOIL SIDE)

Y/C NR PACK SCHEMATIC DIAGRAM

⇦ MAIN SIGNAL PATH IN REC MODE(VHS).
⇦□ MAIN SIGNAL PATH IN PLAYBACK MODE(VHS).
⬅■ MAIN SIGNAL PATH IN PLAYBACK MODE(S-VHS).

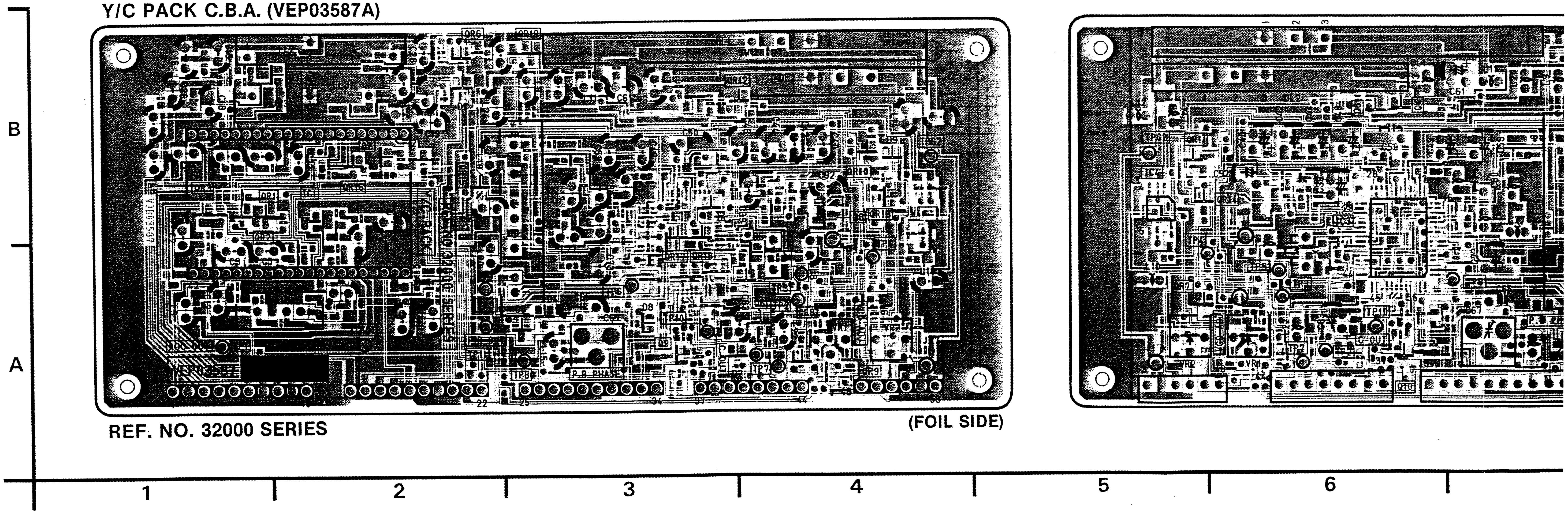

F
E
D
C
B
A
1
2
3
4
5
6
7
+12V
11.9
+5V
5.2
S-VHS Ⓗ
EE Ⓗ
DETAIL Ⓛ
S-VHS Y IN
VHS Y IN
PB CNR 1
L34001 100µ
R34001 150
D34001 MA4091-M (9.1V)
C34006 0.01
C34001 16V10
C34002 0.01
C34003 16V10
C34004 16V10
L34002 100µ
C34005 0.01
IC34001 MSM6965-3RS
VDD
VSS GND
VCC 5V
OUT
CCD
COMP
CLK
IN
VOB
C34007 0.01
R34002 8200
C34009 25V4.7
Q34001 2SC2295 (BUFFER)
R34007 1K
R34006 2200
FL34001 VLF0567
Y.NR BAL
C34015 68P
VR34001 10K
C34016 25V4.7
C34011 0.1
Q34002 2SC2295 (OSC)
R34003 10K
X34001 VSX0225
C34010 0.01
C34013 100P
C34012 68P
R34004 2700
R34005 18K
C34014 27P
TP34001 0.54Vp-p PLAY
TP34001 1.3Vp-p REC
R34009 47K
D34008 18K
QR34001 UN2213 (EE Ⓗ: ON)
47K
D34002 MA151WK
R34010 22K
C34008 0.33
C34017 0.01
R34011 100K
TP34001
R34012 27K
C34021 10V22
C34020 33P
R34013 3300
JW34002
C34018 100P
C34019 10V22
AGC LEVEL
VR34002 20K
C34022 0.01
R34016 3300
DOP 0.3
YNR OUT 2.6
DET PULSE 0
D34003 MA151K
DET
DOP DEP
SP/ELP
LIM
LPF
DET3
CORR DET
Ⓗ:VHS Y.SEP
Ⓜ:S-VHS
Ⓛ:VHS NOR
Ⓗ:OFF
Ⓜ:ADJ
Ⓛ:FIX
EE(S)
VV(V)
-4.1dB
-3dB
-6.4dB
0dB
YEQ
-29.5dB
-20dB
-30dB
X.CTL
±6dB
IC34002 AN3495K
CEQ
-20.8dB
-0.8dB
-2.1dB
-13.2dB
W.EX
GCA
-6dB
DET7
V.DET
Ⓗ ED
Ⓜ LNC-
Ⓛ LNC
EE DET
LIM ADJ
Y.SEP
S10
OFF
ED
S11
NOR
-9.5dB
40dB
50K
HEAD SW 0 (2.4)
YNR 1 1.5
YNR 2 0
PB C 4.43 0
CNR OFF Ⓗ 1.6
CNR LIM OUT 0
R34023 27K
C34034 0.022
C34035 10V10
C34036 16V10
R34030 47K
C34023 0.01
C34024 0.01
C34026 120P
C34025 6V47
C34027 0.01
C34029 0.01
R34017 27K
R34018 22K
C34028 0.01
R34020 680
C34030 10P
R34019 2200
C34032 0.01
C34031 0.01
C34033 18P
R34021 1000
R34022 1500
C34038 0.01
R34024 270
DL34001 VLD0089
1H DELAY
L34003 100µ
R34026 10K
R34028 470
C34040 470P (CHROMA PHASE)
C34039 0.01
Q34004 2SC2295
VR34003 500
R34025 1200
R34027 10K
R34029 470
Q34005 2SD601 (CHROMA BALANCE)
VR34004 1K
L34004 15µ
L34005 15µ
CHROMA.P
CHROMA.G
TP34002
TP34002 1.2Vp-p PLAY

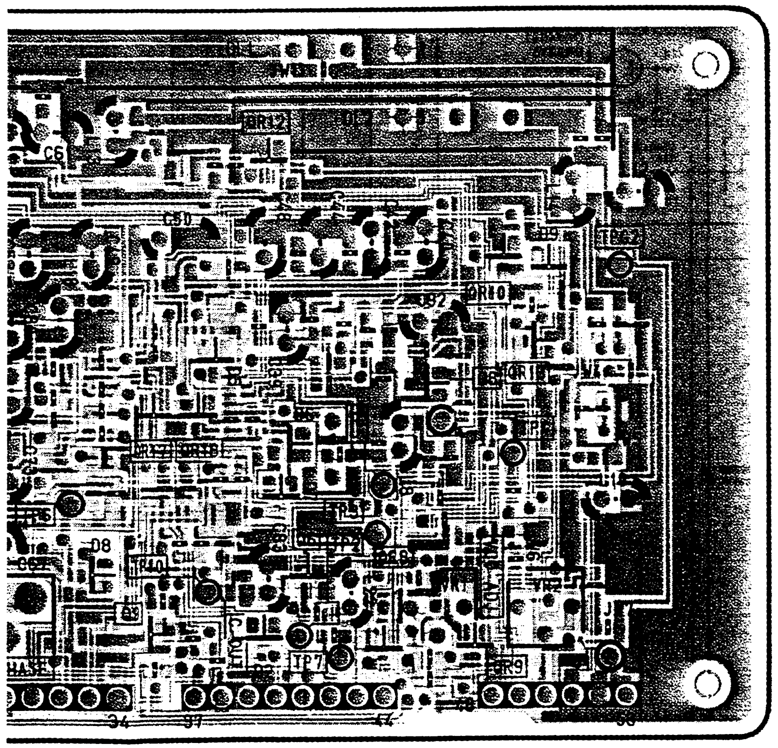
Y/C NR PACK C.B.A.(VEP03615A)

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

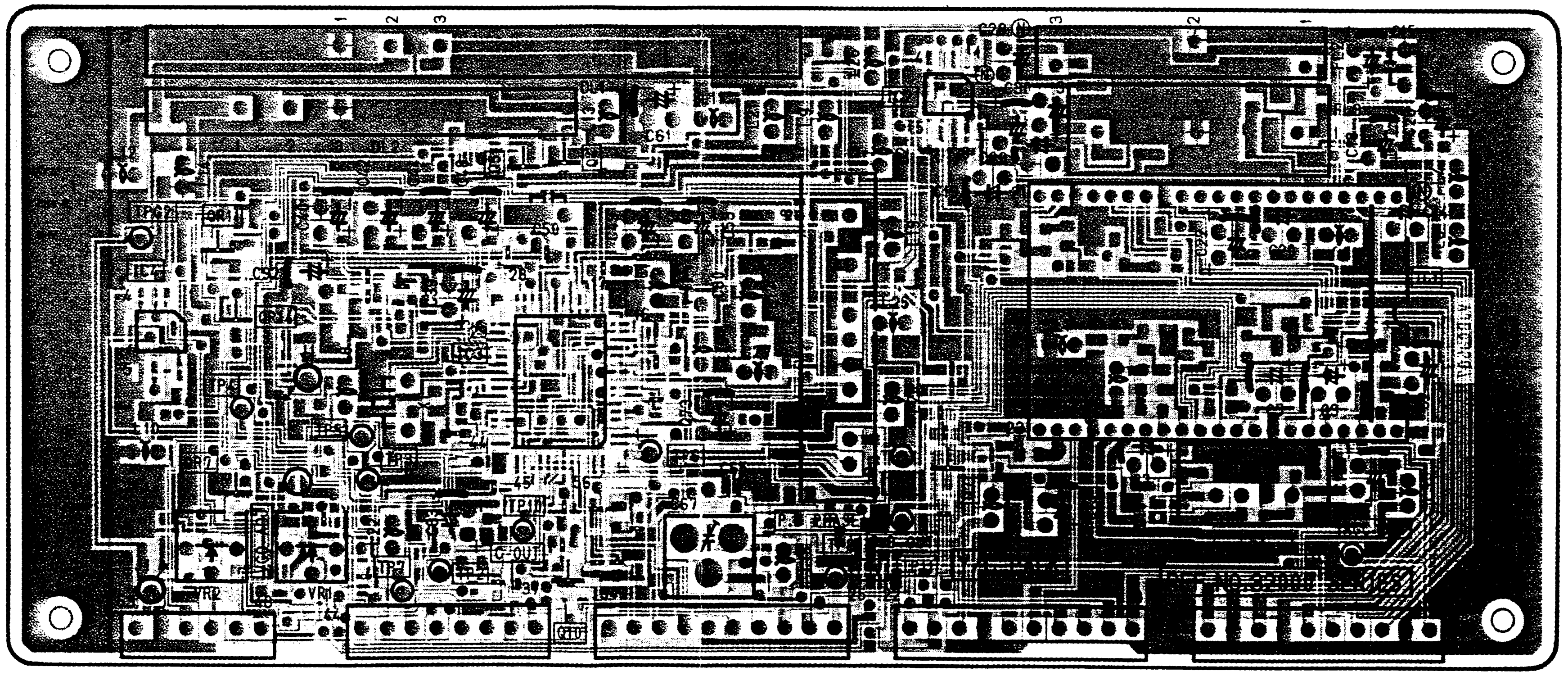
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS REC MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE.
MEASUREMENT SIGNAL...PAL COLOUR SIGNAL, MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

Y/C PACK C.B.A. (VEP03587A)


Y/C PACK C.B.A. (VEP03587A)
B
A
P.B PHASE
TP7
TP8
C-OUT
VR1
VR2
REF. NO. 32000 SERIES
(FOIL SIDE)
1
2
3
4
5
6



(FOIL SIDE)

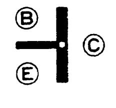


(COMPONENT SIDE)

Y/C PACK C.B.A.	
Transistor	
Q32001	A-2 Ⓕ
Q32002	B-2 Ⓕ
Q32003	B-2 Ⓕ
Q32004	B-6 Ⓒ
Q32005	B-6 Ⓒ
Q32006	A-4 Ⓕ
Q32007	A-7 Ⓒ
Q32008	B-4 Ⓕ
Q32009	A-3 Ⓕ
Q32010	A-6 Ⓒ
Transistor & Resistor	
QR32001	B-1 Ⓕ
QR32002	B-1 Ⓕ
QR32003	B-1 Ⓕ
QR32006	B-2 Ⓕ
QR32007	A-5 Ⓒ
QR32008	A-4 Ⓕ
QR32009	A-4 Ⓕ
QR32010	B-4 Ⓕ
QR32011	B-5 Ⓒ
QR32012	B-4 Ⓕ
QR32013	B-4 Ⓕ
QR32014	B-6 Ⓒ
QR32015	B-2 Ⓕ
QR32016	B-2 Ⓕ
QR32017	A-3 Ⓕ
QR32018	B-3 Ⓕ
QR32019	B-3 Ⓕ
Integrated Circuit	
IC32001	B-8 Ⓒ
IC32002	B-7 Ⓒ
IC32003	B-6 Ⓒ
Test Point	
TP32001	A-1 Ⓕ
TP32001	A-8 Ⓒ
TP32002	A-4 Ⓕ
TP32002	A-6 Ⓒ
TP32003	A-4 Ⓕ
TP32003	A-6 Ⓒ
TP32004	A-4 Ⓕ
TP32004	A-5 Ⓒ
TP32005	A-4 Ⓕ
TP32005	A-6 Ⓒ
TP32006	A-3 Ⓕ
TP32006	A-6 Ⓒ
TP32007	A-4 Ⓕ
TP32007	A-6 Ⓒ
TP32008	A-3 Ⓕ
TP32008	A-7 Ⓒ
TP32009	A-2 Ⓕ
TP32009	A-7 Ⓒ
TP32010	A-3 Ⓕ
TP32010	A-6 Ⓒ
TP32011	A-2 Ⓕ
TP32011	A-7 Ⓒ
TPG32001	A-2 Ⓕ
TPG32001	A-8 Ⓒ
TPG32002	B-4 Ⓕ
TPG32002	B-5 Ⓒ
Adjustment	
VR32001	A-4 Ⓕ
VR32001	A-6 Ⓒ
VR32002	A-4 Ⓕ
VR32002	A-5 Ⓒ

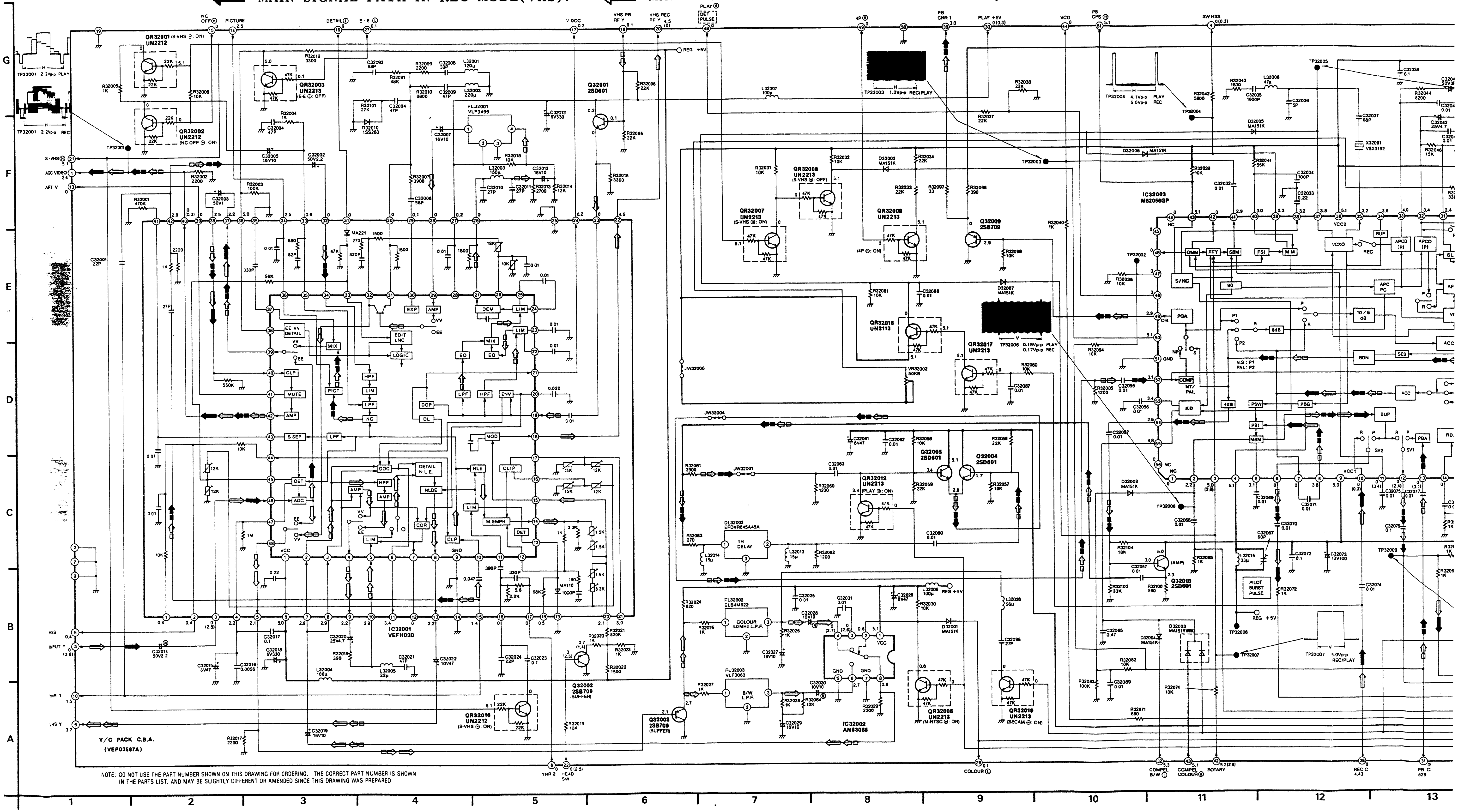
ADDRESS INFORMATION
Ⓕ ... FOIL SIDE
Ⓒ ... COMPONENT SIDE

TRANSISTOR INFORMATION



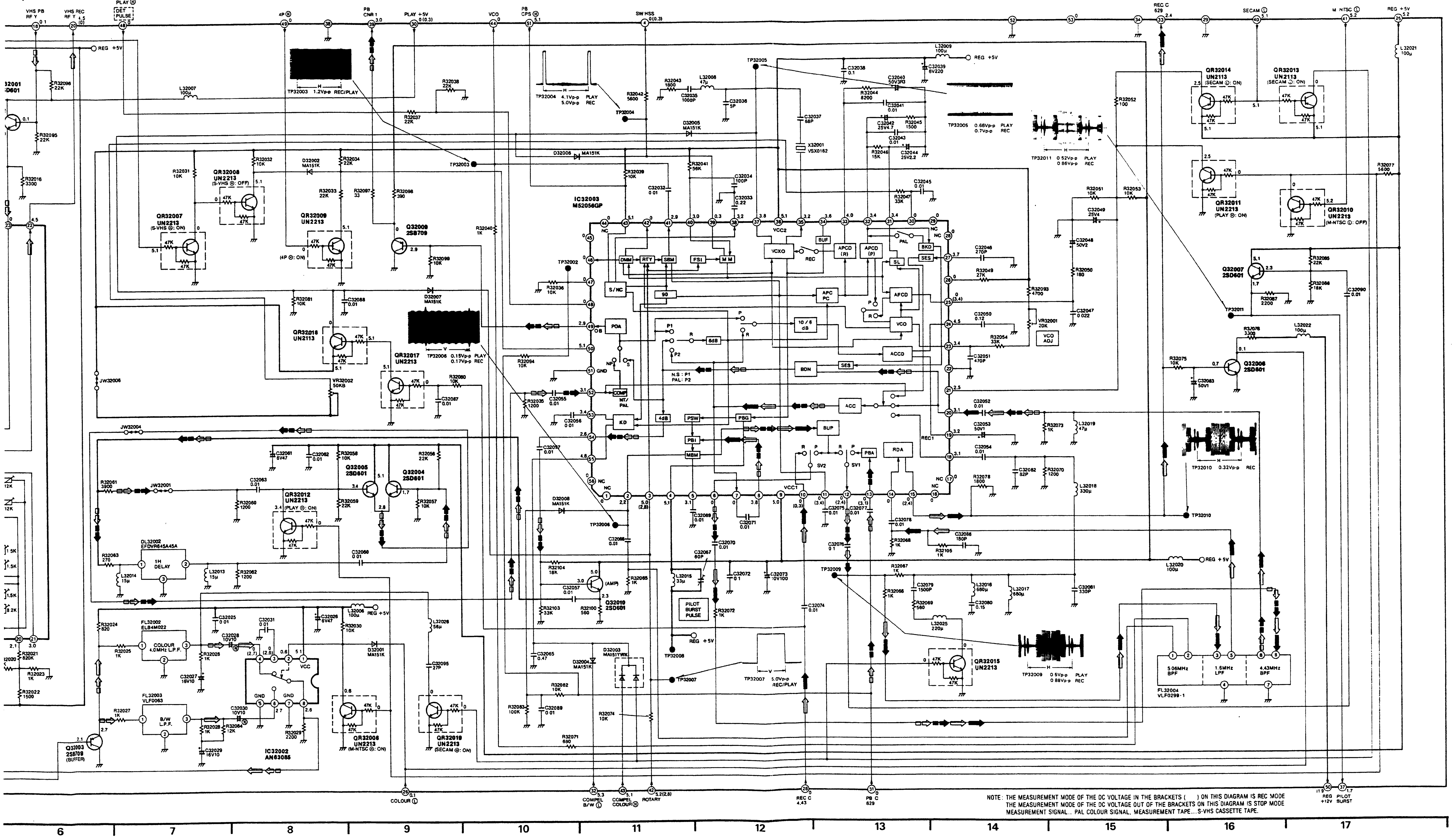
Y/C PACK SCHEMATIC DIAGRAM

MAIN SIGNAL PATH IN REC MODE(VHS). MAIN SIGNAL PATH IN REC MODE(S-VHS). MAIN SIGNAL PATH IN PLAYBACK MODE(VHS).


Y/C PACK C.B.A.
(VEP03587A)
IC32001
VEFH03D
IC32002
AN63085
IC32003
M52056GP
QR32001 (S-VHS ⓢ: ON) UN2212
QR32002 UN2212 (NC OFF ⓢ: ON)
QR32003 UN2213 (E-E ⓢ: OFF)
Q32001 2SD601
Q32002 2SB709 (BUFFER)
Q32003 2SB709 (BUFFER)
Q32004 2SD601
Q32005 2SD601
Q32009 2SB709
Q32010 2SD601
QR32007 UN2213 (S-VHS ⓢ: ON)
QR32008 UN2213 (S-VHS ⓢ: OFF)
QR32009 UN2213 (4P ⓢ: ON)
QR32012 UN2213 (PLAY ⓢ: ON)
QR32016 UN2212 (S-VHS ⓢ: ON)
QR32017 UN2213
QR32018 UN2113
QR32006 UN2213 (M-NTSC ⓢ: ON)
QR32019 UN2213 (SECAM ⓢ: ON)
DL32001 EFDVR645A45A 1H DELAY
FL32001 VLF0499
FL32002 ELB4M022 COLOUR 4.0MHz L.P.F.
FL32003 VLF0063 B/W L.P.F.
X32001 VSX0162
TP32001 2.2Vp-p PLAY
TP32001 2.2Vp-p REC
TP32003 1.2Vp-p REC/PLAY
TP32004 4.1Vp-p PLAY 5.0Vp-p REC
TP32006 0.15Vp-p PLAY 0.17Vp-p REC
TP32007 5.0Vp-p REC/PLAY
NC OFFⓢ
PICTURE
DETAILⓢ
E·Eⓢ
V DOC
VHS PB RF Y
VHS REC RF Y
PLAYⓢ
DET PULSE
4Pⓢ
PB CNR 1
PLAY +5V
VCO
PB CPS ⓢ
SW HSS
S-VHSⓢ
AGC VIDEO
ART V
HSS
INPUT Y
YNR 1
VHS Y
YNR 2
EAD SW
COLOUR ⓢ
COMPEL B/W ⓢ
COMPEL COLOUR ⓢ
ROTARY
REC C 4.43
PB C 629
REG +5V
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13

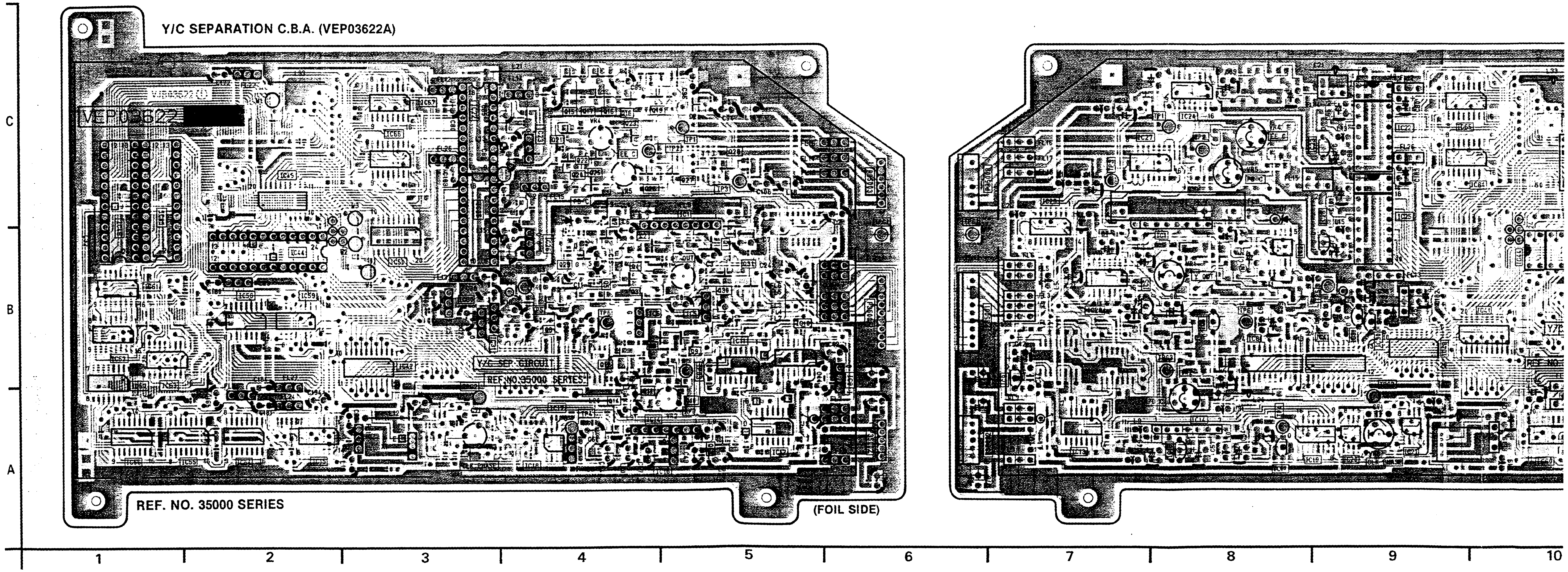
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED

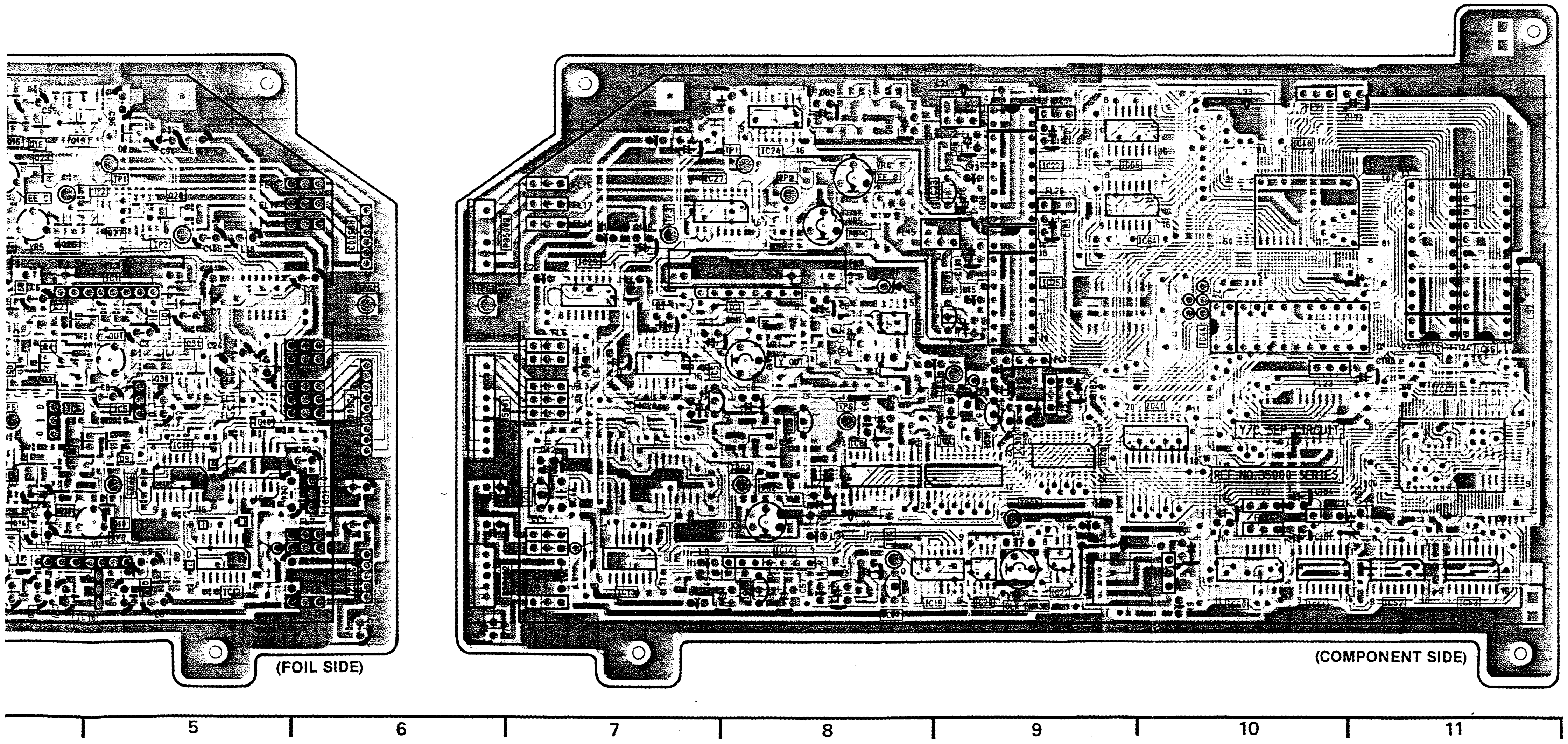
⇦ MAIN SIGNAL PATH IN REC MODE(S-VHS). ⬅ MAIN SIGNAL PATH IN PLAYBACK MODE(VHS). ⇦ MAIN SIGNAL PATH IN PLAYBACK MODE(S-VHS).


IC32003 M52056GP
IC32002 AN63085
DL32002 EFDVR645A45A 1H DELAY
FL32002 ELB4M022 COLOUR 4.0MHz L.P.F.
FL32003 VLF0063 B/W L.P.F.
FL32004 VLF0298-1
5.06MHz BPF
1.6MHz LPF
4.43MHz BPF
X32001 VSX0162
TP32003 1.2Vp-p REC/PLAY
TP32004 4.1Vp-p PLAY 5.0Vp-p REC
TP32005 0.66Vp-p PLAY 0.7Vp-p REC
TP32011 0.52Vp-p PLAY 0.86Vp-p REC
TP32006 0.15Vp-p PLAY 0.17Vp-p REC
TP32010 0.32Vp-p REC
TP32007 5.0Vp-p REC/PLAY
TP32009 0.5Vp-p PLAY 0.88Vp-p REC
PILOT BURST PULSE
VCO ADJ
COLOUR Ⓛ
COMPEL B/W Ⓛ
COMPEL COLOUR Ⓗ
ROTARY
REC C 4.43
PB C 629
REG +12V
PILOT BURST
6
7
8
9
10
11
12
13
14
15
16
17

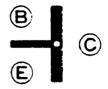
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS REC MODE
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE
MEASUREMENT SIGNAL... PAL COLOUR SIGNAL, MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

Y/C SEPARATION C.B.A. (VEP03622A)


Y/C SEPARATION C.B.A. (VEP03622A)
VEP03622
Y/C SEP. CIRCUIT
REF. NO. 35000 SERIES
REF. NO. 35000 SERIES
(FOIL SIDE)
C
B
A
1
2
3
4
5
6
7
8
9
10


(FOIL SIDE)
(COMPONENT SIDE)
Y/C SEP CIRCUIT
RCE NO.35000 SERIES
5
6
7
8
9
10
11

TRANSISTOR INFORMATION



Y/C SEPARATION C.B.A.

Transistor		
Q35001	B-5	Ⓕ
Q35002	B-4	Ⓕ
Q35004	B-4	Ⓕ
Q35005	B-4	Ⓕ
Q35006	B-4	Ⓕ
Q35007	B-4	Ⓕ
Q35008	B-4	Ⓕ
Q35009	B-5	Ⓕ
Q35010	A-5	Ⓕ
Q35011	B-4	Ⓕ
Q35012	B-4	Ⓕ
Q35013	A-5	Ⓕ
Q35014	A-4	Ⓕ
Q35015	C-4	Ⓕ
Q35016	C-4	Ⓕ
Q35017	C-4	Ⓕ
Q35018	C-4	Ⓕ
Q35019	C-4	Ⓕ
Q35020	C-4	Ⓕ
Q35021	C-4	Ⓕ
Q35022	C-4	Ⓕ
Q35023	C-4	Ⓕ
Q35025	C-4	Ⓕ
Q35026	C-4	Ⓕ
Q35027	C-4	Ⓕ
Q35028	C-5	Ⓕ
Q35029	B-4	Ⓕ
Q35030	B-5	Ⓕ
Q35031	B-5	Ⓕ

Integrated Circuit		
IC35001	B-8	Ⓒ
IC35002	B-8	Ⓒ
IC35004	B-9	Ⓒ
IC35005	B-5	Ⓕ
IC35005	B-7	Ⓒ
IC35006	B-4	Ⓕ
IC35006	B-8	Ⓒ
IC35008	B-8	Ⓒ
IC35009	B-7	Ⓒ
IC35009	B-6	Ⓕ
IC35010	B-5	Ⓕ
IC35011	B-5	Ⓕ
IC35012	A-5	Ⓕ
IC35013	A-7	Ⓒ
IC35014	A-5	Ⓕ
IC35014	A-8	Ⓒ
IC35015	A-2	Ⓕ
IC35017	A-4	Ⓕ
IC35017	A-8	Ⓒ
IC35018	A-4	Ⓒ
IC35019	A-9	Ⓕ
IC35020	A-9	Ⓕ
IC35020	A-9	Ⓕ
IC35021	A-9	Ⓕ
IC35022	C-9	Ⓕ
IC35022	C-3	Ⓕ
IC35023	C-3	Ⓕ
IC35023	B-10	Ⓒ
IC35024	C-8	Ⓒ
IC35025	C-9	Ⓒ
IC35026	B-4	Ⓕ
IC35026	B-9	Ⓒ
IC35027	C-7	Ⓒ
IC35028	B-7	Ⓒ
IC35030	B-3	Ⓕ
IC35030	B-9	Ⓒ
IC35031	B-3	Ⓕ
IC35031	B-9	Ⓒ
IC35041	C-9	Ⓒ
IC35042	B-3	Ⓕ
IC35043	B-9	Ⓒ
IC35044	B-2	Ⓕ
IC35044	B-10	Ⓒ
IC35045	C-1	Ⓕ
IC35045	C-11	Ⓒ
IC35046	C-1	Ⓕ
IC35046	C-11	Ⓒ
IC35047	B-11	Ⓒ
IC35048	C-10	Ⓒ
IC35049	C-2	Ⓕ
IC35050	B-3	Ⓕ
IC35051	A-10	Ⓒ
IC35052	A-11	Ⓒ
IC35053	A-11	Ⓒ
IC35054	A-2	Ⓕ
IC35055	A-1	Ⓕ
IC35056	A-1	Ⓕ
IC35057	A-1	Ⓕ
IC35058	B-2	Ⓕ
IC35059	B-2	Ⓕ
IC35060	A-10	Ⓒ
IC35061	B-1	Ⓕ
IC35062	B-1	Ⓕ
IC35063	B-1	Ⓕ
IC35064	C-9	Ⓒ
IC35065	C-9	Ⓒ
IC35066	C-3	Ⓕ
IC35067	C-3	Ⓕ

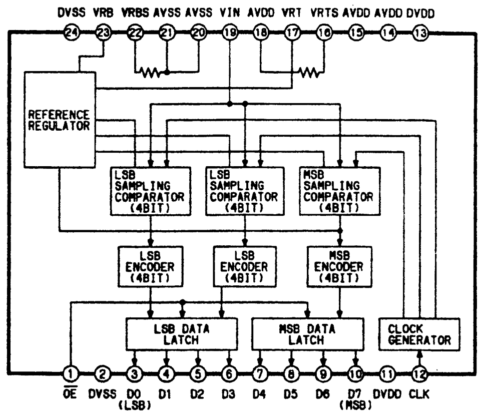
Test Point		
TP35001	C-5	Ⓕ
TP35001	C-8	Ⓒ
TP35002	C-4	Ⓕ
TP35002	C-8	Ⓒ
TP35003	C-5	Ⓕ
TP35003	C-7	Ⓒ
TP35004	A-4	Ⓕ
TP35004	A-8	Ⓒ
TP35005	B-4	Ⓕ
TP35005	B-9	Ⓒ
TP35006	B-4	Ⓕ
TP35006	B-8	Ⓒ
TPG35003	A-4	Ⓕ
TPG35003	B-8	Ⓒ

Adjustment		
VR35002	A-8	Ⓒ
VR35004	C-8	Ⓒ
VR35005	C-8	Ⓒ

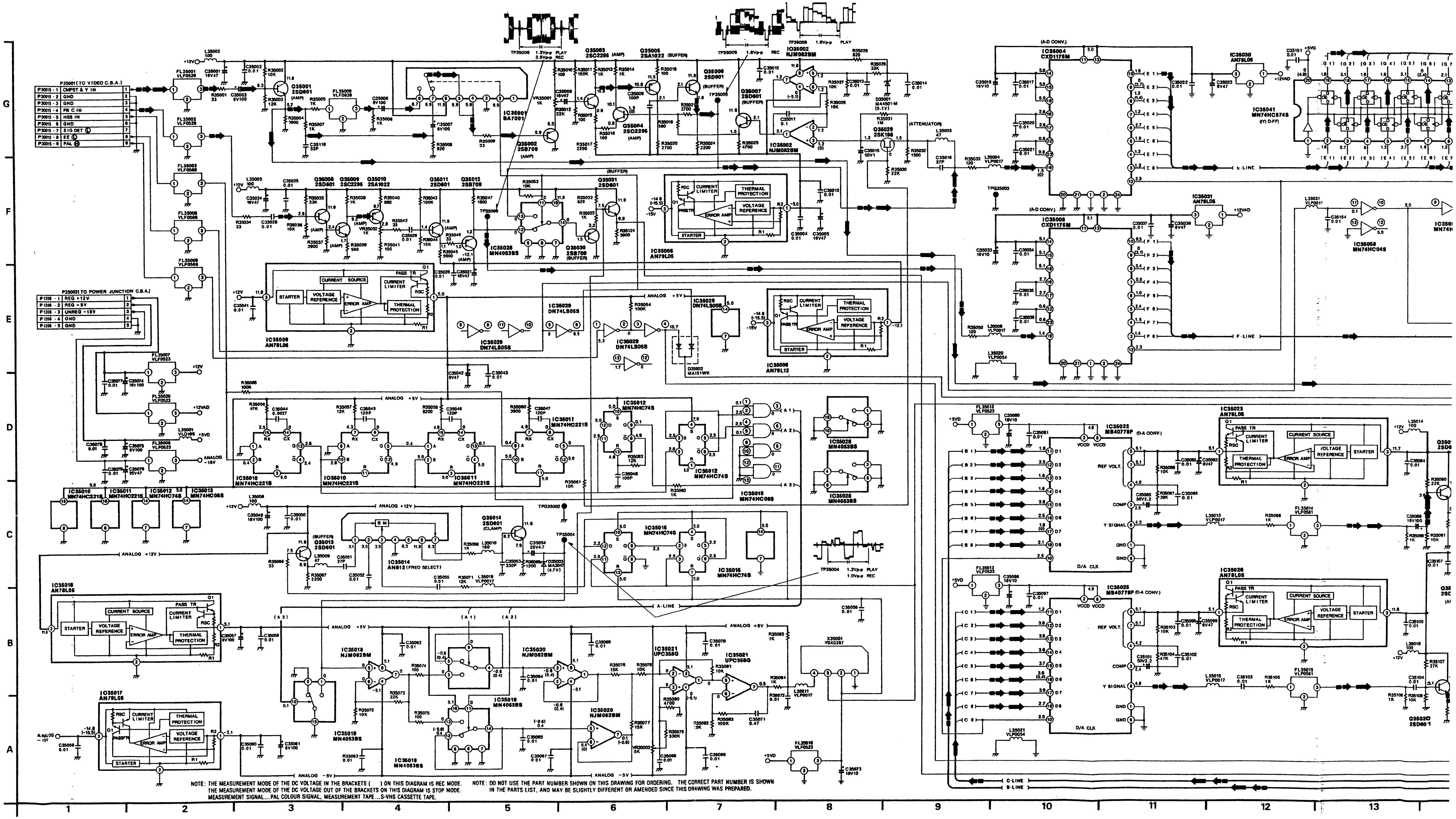
Connector		
P35001	B-6	Ⓕ
P35001	B-6	Ⓒ
P35002	A-6	Ⓕ
P35002	A-6	Ⓒ
P35003	C-6	Ⓕ
P35003	C-6	Ⓒ

ADDRESS INFORMATION
Ⓕ... FOIL SIDE
Ⓒ... COMPONENT SIDE

IC35004 CXD1175M


DVSS
VRB
VRBS
AVSS
AVSS
VIN
AVDD
VRT
VRTS
AVDD
AVDD
DVDD
㉔
㉓
㉒
㉑
⑳
⑲
⑱
⑰
⑯
⑮
⑭
⑬
REFERENCE REGULATOR
LSB SAMPLING COMPARATOR (4BIT)
LSB SAMPLING COMPARATOR (4BIT)
MSB SAMPLING COMPARATOR (4BIT)
LSB ENCODER (4BIT)
LSB ENCODER (4BIT)
MSB ENCODER (4BIT)
LSB DATA LATCH
MSB DATA LATCH
CLOCK GENERATOR
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
$\overline{OE}$
DVSS
D0 (LSB)
D1
D2
D3
D4
D5
D6
D7 (MSB)
DVDD
CLK

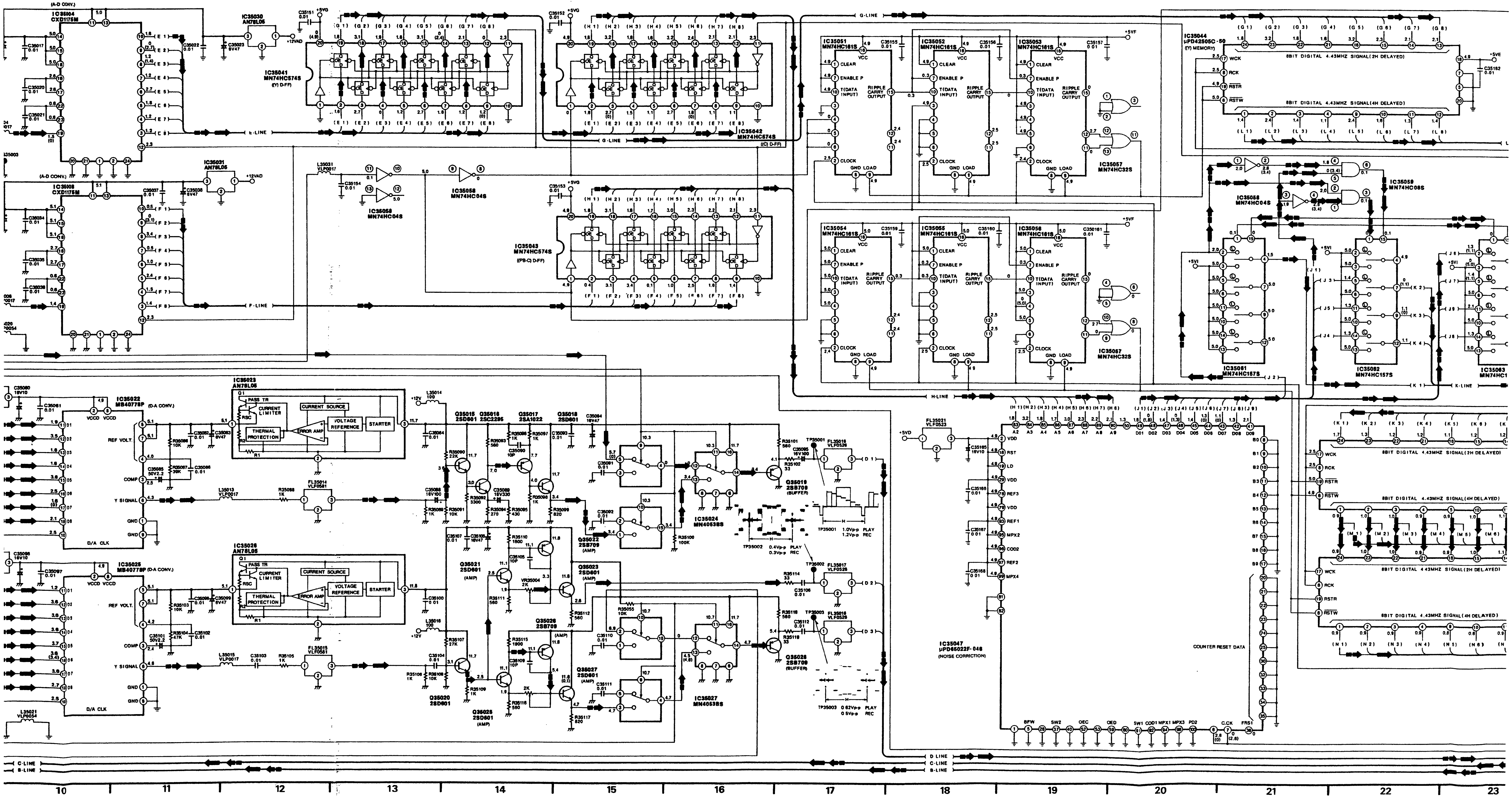
Y/C SEPARATION SCHEMATIC DIAGRAM


P35001 (TO VIDEO C.B.A.)
P30015 - 1 CMPST & Y IN 1
P30015 - 2 GND 2
P30015 - 3 GND 3
P30015 - 4 PB C IN 4
P30015 - 5 HSS IN 5
P30015 - 6 GND 6
P30015 - 7 SIG DET Ⓛ 7
P30015 - 8 EE Ⓛ 8
P30015 - 9 PAL Ⓗ 9
P35002 (TO POWER JUNCTION C.B.A.)
P1206 - 1 REG +12V 1
P1206 - 2 REG +5V 2
P1206 - 3 UNREG -15V 3
P1206 - 4 GND 4
P1206 - 5 GND 5
Q35001 2SD601
Q35002 2SB709
Q35003 2SC2295 (AMP)
Q35005 2SA1022 (BUFFER)
Q35004 2SC2295
Q35006 2SD601
Q35007 2SD601
IC35001 BA7001
IC35002 NJM082BM
Q35029 2SK196
IC35004 CXD1175M (A-D CONV.)
IC35030 AN78L05
IC35041 MN74HC574S (Y) D-FF
Q35008 2SD601
Q35009 2SC2295
Q35010 2SA1022
Q35011 2SD601
Q35012 2SB709
Q35031 2SD601
Q35030 2SB709
IC35028 MN4053BS
IC35005 AN79L05
IC35008 CXD1175M (A-D CONV.)
IC35031 AN78L05
IC35058 MN74HC04S
IC35009 AN78L08
IC35029 DN74LS05S
IC35006 AN79L12
D35002 MA151WK
IC35010 MN74HC221S
IC35011 MN74HC221S
IC35012 MN74HC74S
IC35013 MN74HC08S
IC35028 MN4053BS
IC35022 MB40778P (D-A CONV.)
IC35023 AN78L05
Q35013 2SD601
IC35014 AN812 (FREQ SELECT)
Q35014 2SD601 (CLAMP)
IC35015 MN74HC74S
IC35016 AN78L05
IC35025 MB40778P (D-A CONV.)
IC35026 AN78L05
IC35017 AN79L05
IC35018 NJM082BM
IC35019 MN4053BS
IC35020 NJM082BM
IC35021 UPC358G
X35001 YSX0297
Q35020 2SD601
TP35006 1.3Vp-p PLAY 2.5Vp-p REC
TP35005 1.6Vp-p PLAY
TP35004 1.3Vp-p PLAY 1.0Vp-p REC
E-LINE
F-LINE
A-LINE
C-LINE
B-LINE
ANALOG +5V
ANALOG +12V
ANALOG -5V
D/A CLK
REF VOLT.
COMP
Y SIGNAL
GND
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS REC MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE.
MEASUREMENT SIGNAL...PAL COLOUR SIGNAL, MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

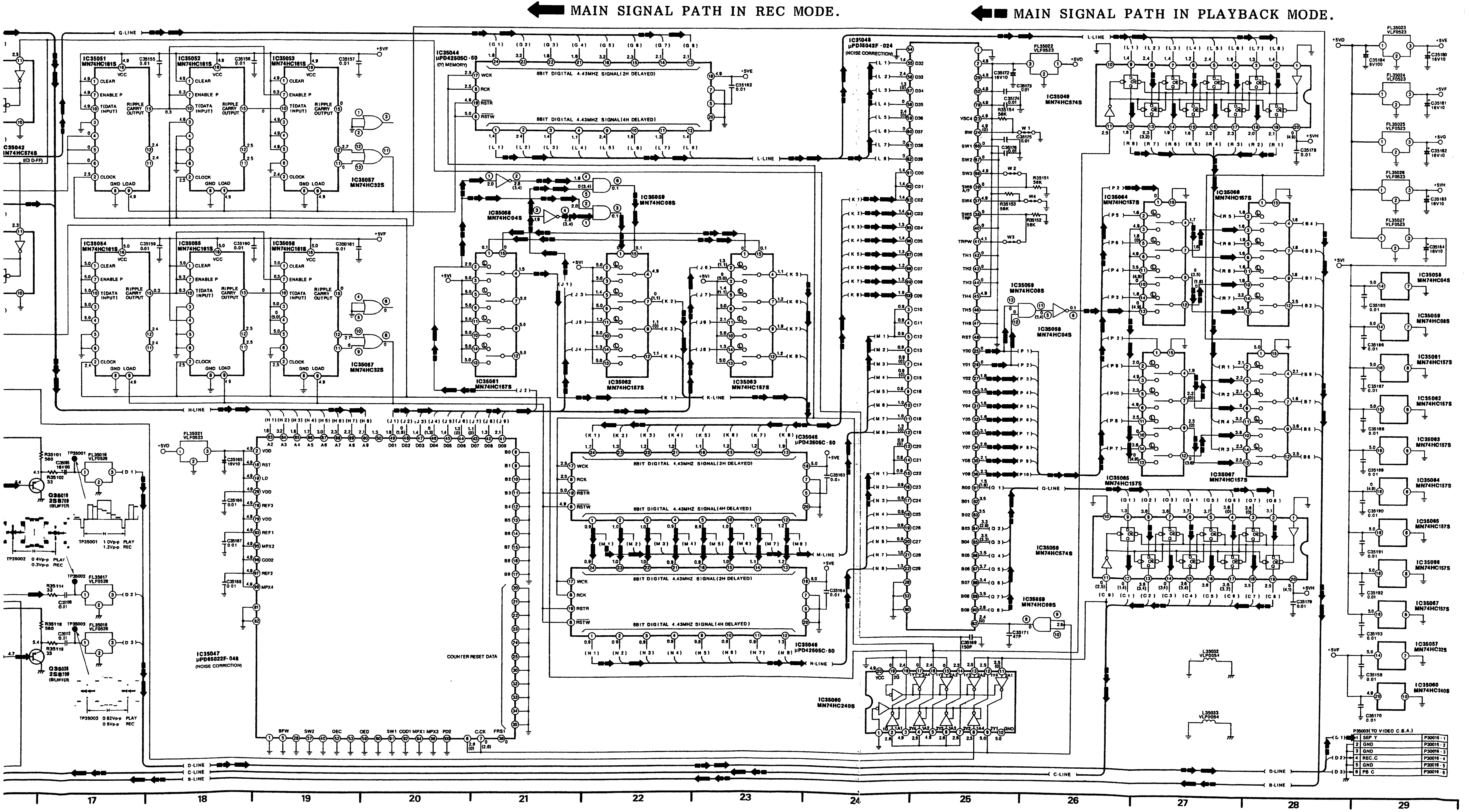
MAIN SIGNAL PATH IN F


IC35004 CXD1175M (A-D CONV.)
IC35008 CXD1175M (A-D CONV.)
IC35030 AN78L05
IC35031 AN78L05
IC35041 MN74HC574S (Y) D-FF
IC35042 MN74HC574S (C) D-FF
IC35043 MN74HC574S (PB-C) D-FF
IC35058 MN74HC04S
IC35051 MN74HC161S
IC35052 MN74HC161S
IC35053 MN74HC161S
IC35054 MN74HC161S
IC35055 MN74HC161S
IC35056 MN74HC161S
IC35057 MN74HC32S
IC35044 µPD42505C-50 (Y) MEMORY
8BIT DIGITAL 4.43MHZ SIGNAL (2H DELAYED)
8BIT DIGITAL 4.43MHZ SIGNAL (4H DELAYED)
IC35059 MN74HC08S
IC35061 MN74HC157S
IC35062 MN74HC157S
IC35022 MB40778P (D-A CONV.)
IC35025 MB40778P (D-A CONV.)
IC35023 AN78L05
IC35026 AN78L05
PASS TR
CURRENT LIMITER
CURRENT SOURCE
THERMAL PROTECTION
ERROR AMP
VOLTAGE REFERENCE
STARTER
REF VOLT.
COMP
Y SIGNAL
GND
D/A CLK
Q35015 2SD601
Q35016 2SC2295
Q35017 2SA1022
Q35018 2SD601
Q35019 2SB709 (BUFFER)
Q35020 2SD601
Q35021 2SD601 (AMP)
Q35022 2SB709 (AMP)
Q35023 2SD601 (AMP)
Q35025 2SD601 (AMP)
Q35026 2SB709 (AMP)
Q35027 2SD601 (AMP)
Q35028 2SB709 (BUFFER)
IC35024 MN4053BS
IC35027 MN4053BS
TP35001 1.0Vp-p PLAY 1.2Vp-p REC
TP35002 0.4Vp-p PLAY 0.3Vp-p REC
TP35003 0.62Vp-p PLAY 0.5Vp-p REC
IC35047 µPD65022F-048 (NOISE CORRECTION)
COUNTER RESET DATA
E-LINE
F-LINE
G-LINE
H-LINE
K-LINE
D LINE
C-LINE
B-LINE
10
11
12
13
14
15
16
17
18
19
20
21
22
23

VIDE-V11157 / Druck 43

Y/C SEPARATION

VIDEO (MAIN-1), (MAIN-2)


MAIN SIGNAL PATH IN REC MODE.
MAIN SIGNAL PATH IN PLAYBACK MODE.
G-LINE
L-LINE
H-LINE
K-LINE
M-LINE
N-LINE
Q-LINE
D-LINE
C-LINE
B-LINE
IC35042 MN74HC574S (IC D-FF)
IC35051 MN74HC161S
IC35052 MN74HC161S
IC35053 MN74HC161S
IC35054 MN74HC161S
IC35055 MN74HC161S
IC35056 MN74HC161S
IC35057 MN74HC32S
IC35044 μPD42505C-50 (Y) MEMORY)
8BIT DIGITAL 4.43MHZ SIGNAL(2H DELAYED)
8BIT DIGITAL 4.43MHZ SIGNAL(4H DELAYED)
IC35058 MN74HC04S
IC35059 MN74HC08S
IC35061 MN74HC157S
IC35062 MN74HC157S
IC35063 MN74HC157S
IC35045 μPD42505C-50
IC35046 μPD42505C-50
IC35047 μPD65022F-046 (NOISE CORRECTION)
COUNTER RESET DATA
IC35048 μPD35042F-024 (NOISE CORRECTION)
IC35049 MN74HC574S
IC35050 MN74HC574S
IC35060 MN74HC240S
IC35064 MN74HC157S
IC35065 MN74HC157S
IC35066 MN74HC157S
IC35067 MN74HC157S
FL35021 VLF0523
FL35022 VLF0523
FL35023 VLF0523
FL35024 VLF0523
FL35025 VLF0523
FL35026 VLF0523
FL35027 VLF0523
FL35016 VLF0526
FL35017 VLF0526
FL35018 VLF0526
L35032 VLP0054
L35033 VLP0054
Q35019 2SB709 (BUFFER)
Q35020 2SB709 (BUFFER)
TP35001 1.0Vp-p PLAY 1.2Vp-p REC
TP35002 0.4Vp-p PLAY 0.3Vp-p REC
TP35003 0.82Vp-p PLAY 0.5Vp-p REC
+5VF
+5VE
+5VD
+5VI
+5VH
+5VG
P35003(TO VIDEO C.B.A.)
1 SEP Y P30016-1
2 GND P30016-2
3 GND P30016-3
4 REC.C P30016-4
5 GND P30016-5
6 PB C P30016-6
17
18
19
20
21
22
23
24
25
26
27
28
29

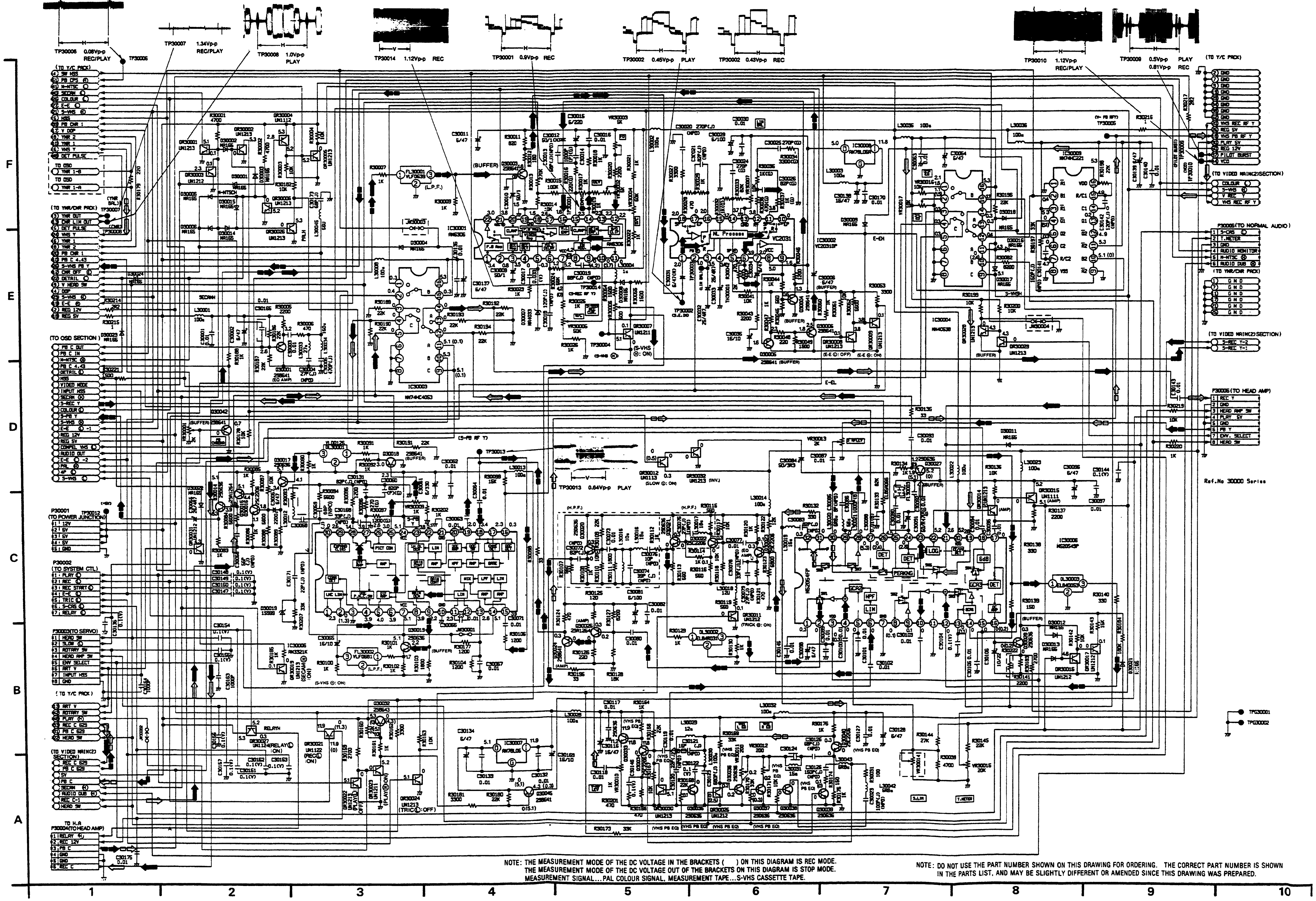
VIDEO (MAIN-1) SCHEMATIC DIAGRAM

⇦ MAIN SIGNAL PATH IN REC MODE(VHS).

⬅ MAIN SIGNAL PATH IN REC MODE(S-VHS).

⇦□ MAIN SIGNAL PATH IN PLAYBACK MODE(VHS).

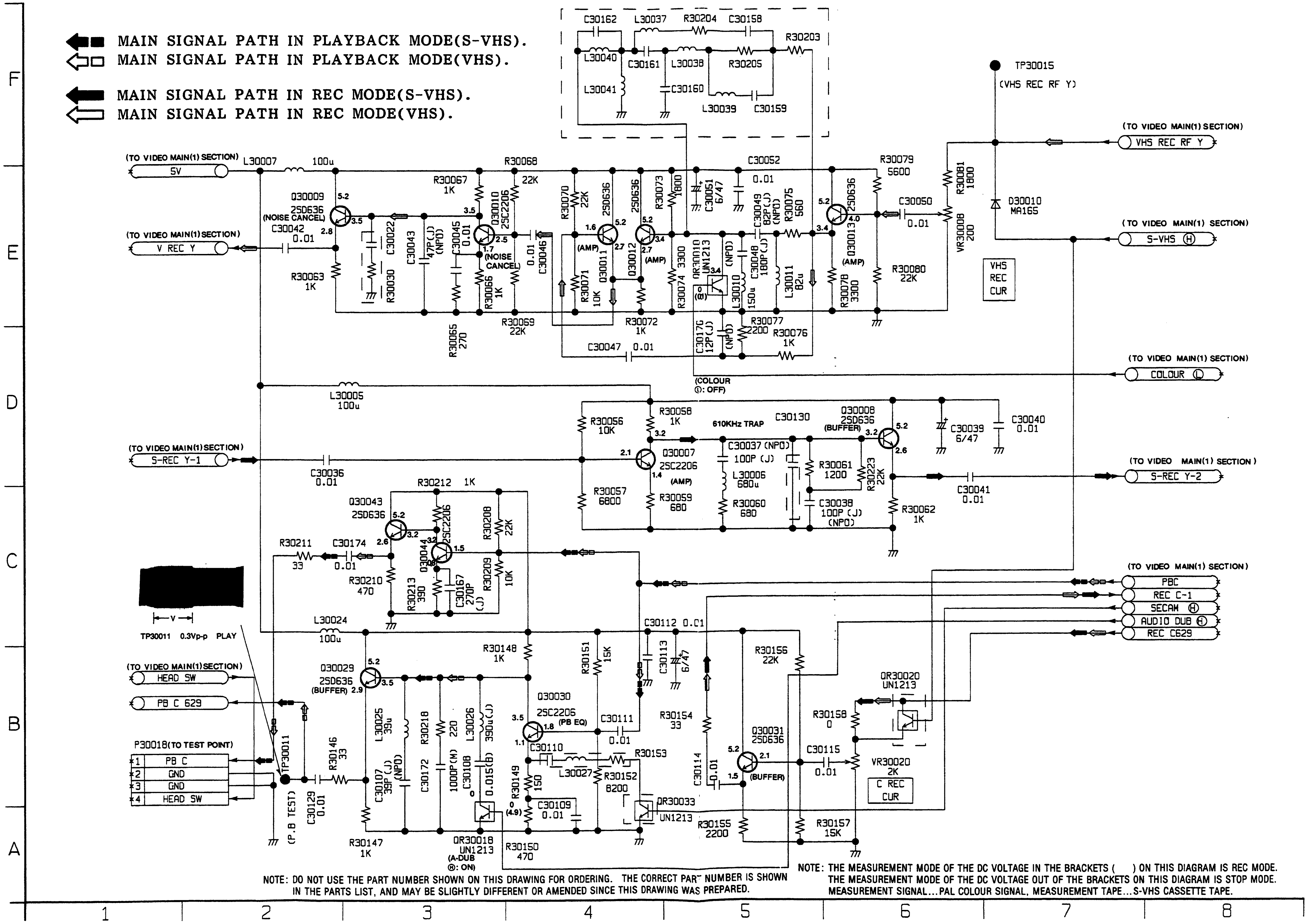
⬅■ MAIN SIGNAL PATH IN PLAYBACK MODE(S-VHS).


TP30006 0.08Vp-p REC/PLAY
TP30007 1.34Vp-p REC/PLAY
TP30008 1.0Vp-p PLAY
TP30014 1.12Vp-p REC
TP30001 0.9Vp-p REC
TP30002 0.45Vp-p PLAY
TP30002 0.43Vp-p REC
TP30010 1.12Vp-p REC/PLAY
TP30009 0.5Vp-p PLAY 0.81Vp-p REC
TP30013 0.64Vp-p PLAY
(TO Y/C PACK)
(TO YNR/CNR PACK)
(TO OSD SECTION)
(TO VIDEO MAIN(2) SECTION)
P30005(TO NORMAL AUDIO)
P30006(TO HEAD AMP)
P30001 (TO POWER JUNCTION)
P30002 (TO SYSTEM CTL)
P30003(TO SERVO)
P30004(TO HEAD AMP)
IC30001 MN4053
IC30002 VC2031P
IC30003 MN74HC4053
IC30004 MN4053B
IC30005 MN4053
IC30006 M52054SP
IC30007 AN78L05
IC30008 AN78L05R
Ref.No 30000 Series
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS REC MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE.
MEASUREMENT SIGNAL...PAL COLOUR SIGNAL. MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

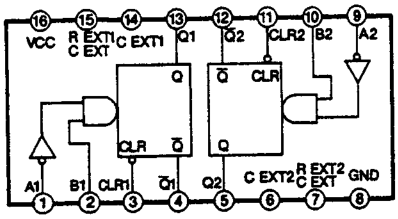
VIDEO (MAIN-2) SCHEMATIC DIAGRAM


MAIN SIGNAL PATH IN PLAYBACK MODE(S-VHS).
MAIN SIGNAL PATH IN PLAYBACK MODE(VHS).
MAIN SIGNAL PATH IN REC MODE(S-VHS).
MAIN SIGNAL PATH IN REC MODE(VHS).
F
E
D
C
B
A
1
2
3
4
5
6
7
8
C30162
L30037
R30204
C30158
R30203
L30040
C30161
L30038
R30205
L30041
C30160
L30039
C30159
TP30015
(VHS REC RF Y)
(TO VIDEO MAIN(1) SECTION)
VHS REC RF Y
(TO VIDEO MAIN(1) SECTION)
5V
L30007
100u
R30068
22K
R30067
1K
C30052
0.01
R30079
5600
R30081
1800
Q30009
2SD636
(NOISE CANCEL)
C30042
0.01
(TO VIDEO MAIN(1)SECTION)
V REC Y
R30063
1K
C30022
C30030
C30043
C30045
47P(J)
(NPO)
Q30010
2SC2206
(NOISE CANCEL)
R30066
1K
R30065
270
R30069
22K
C30046
0.01
R30070
22K
2SD636
Q30011
(AMP)
R30071
10K
Q30012
2SD636
(AMP)
R30073
1800
R30074
3300
R30072
1K
C30047
0.01
C30051
6/47
QR30010
UN1213
C30049
82P(J)
(NPO)
C30048
180P(J)
(NPO)
L30010
150u
R30075
560
L30011
82u
C30176
12P(J)
(NPO)
R30077
2200
R30076
1K
(COLOUR
Ⓛ: OFF)
Q30013
2SD636
(AMP)
R30078
3300
C30050
0.01
R30080
22K
VR30008
200
D30010
MA165
VHS
REC
CUR
(TO VIDEO MAIN(1) SECTION)
S-VHS Ⓗ
(TO VIDEO MAIN(1) SECTION)
COLOUR Ⓛ
L30005
100u
R30056
10K
R30058
1K
610KHz TRAP
C30130
Q30008
2SD636
(BUFFER)
C30039
6/47
C30040
0.01
(TO VIDEO MAIN(1)SECTION)
S-REC Y-1
C30036
0.01
Q30007
2SC2206
(AMP)
C30037 (NPO)
100P (J)
L30006
680u
R30061
1200
R30223
22K
R30057
6800
R30059
680
R30060
680
C30038
100P (J)
(NPO)
R30062
1K
C30041
0.01
(TO VIDEO MAIN(1) SECTION)
S-REC Y-2
R30212 1K
Q30043
2SD636
Q30044
2SC2206
R30208
22K
R30209
10K
R30211
33
C30174
0.01
R30210
470
R30213
390
C30167
270P
(J)
TP30011 0.3Vp-p PLAY
L30024
100u
(TO VIDEO MAIN(1) SECTION)
PBC
REC C-1
SECAM Ⓗ
AUDIO DUB Ⓗ
REC C629
C30112 0.01
(TO VIDEO MAIN(1)SECTION)
HEAD SW
PB C 629
Q30029
2SD636
(BUFFER)
R30148
1K
R30151
15K
C30113
6/47
R30156
22K
QR30020
UN1213
Q30030
2SC2206
(PB EQ)
C30111
0.01
R30154
33
Q30031
2SD636
(BUFFER)
R30158
0
C30115
0.01
VR30020
2K
C REC
CUR
P30018(TO TEST POINT)
1 PB C
2 GND
3 GND
4 HEAD SW
TP30011
(P.B TEST)
C30129
0.01
R30146
33
L30025
39u
C30107
39P(J)
(NPO)
C30172
R30218
220
L30026
390u(J)
1000P(M)
C30108
0.015(B)
C30110
L30027
R30153
R30152
8200
R30149
150
C30109
0.01
QR30033
UN1213
C30114
0.01
R30155
2200
R30157
15K
R30147
1K
QR30018
UN1213
(A-DUB
Ⓗ: ON)
R30150
470

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS REC MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE.
MEASUREMENT SIGNAL...PAL COLOUR SIGNAL, MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

IC30009 MN74HC221



S-VIDEO INPUT C.B.A.	
Connector	
P6701	C-10

ADDRESS INFORMATION

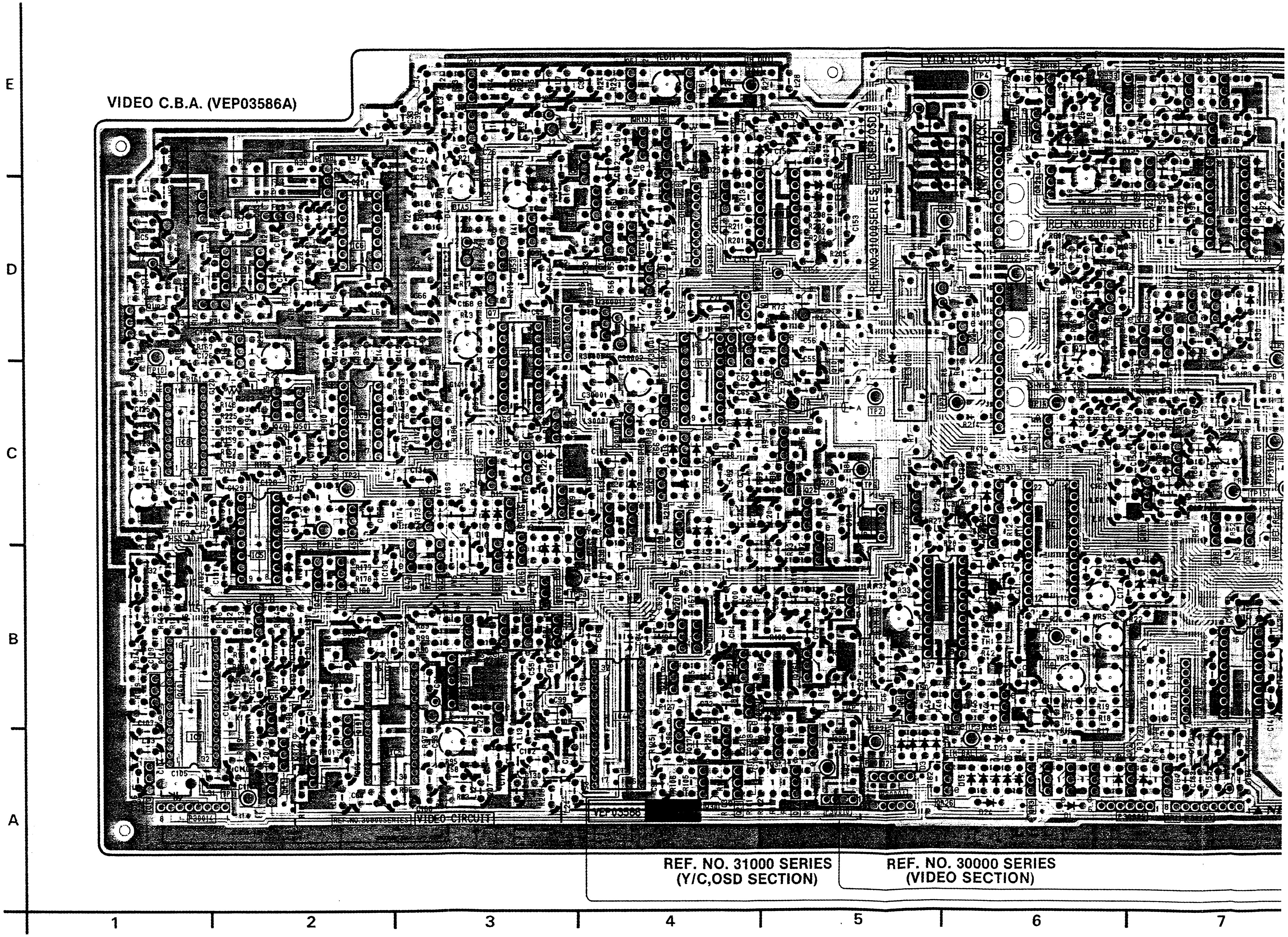
S-VIDEO OUTPUT C.B.A.	
Connector	
P6711	A-10

ADDRESS INFORMATION

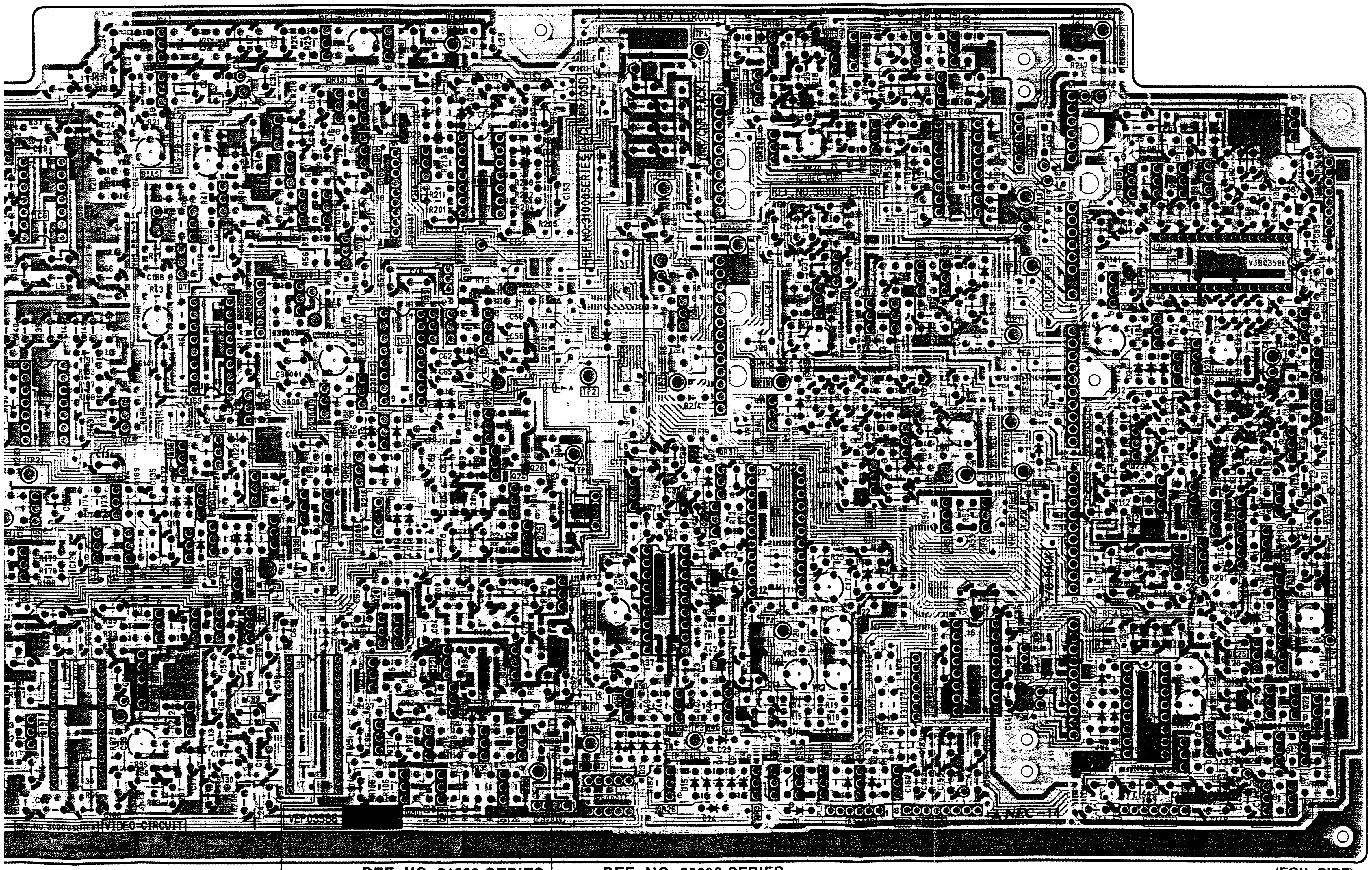
VIDEO C.B.A.	
Transistor	
Q30001	D-4
Q30003	C-6
Q30004	A-6
Q30005	A-6
Q30006	B-5
Q30007	D-6
Q30008	D-6
Q30009	D-7
Q30010	D-7
Q30011	D-7
Q30012	D-7
Q30013	C-7
Q30014	B-3
Q30015	B-3
Q30016	B-3
Q30017	B-3
Q30018	B-3
Q30019	A-2
Q30020	B-8
Q30021	C-8
Q30022	C-8
Q30023	C-8
Q30024	C-9
Q30025	D-9
Q30027	D-8
Q30028	D-8
Q30029	E-6
Q30030	E-7
Q30031	D-7
Q30032	B-9
Q30033	C-9
Q30034	C-8
Q30035	C-9
Q30036	B-9
Q30037	B-9
Q30038	B-9
Q30039	C-9
Q30040	C-9
Q30042	C-4
Q30043	E-7
Q30044	E-7
Q30045	A-9
Q31007	D-3
Q31009	D-3
Q31013	D-4
Q31014	D-4
Q31015	E-3
Q31016	D-3
Q31017	D-4
Q31018	D-4
Q31019	D-4
Q31020	B-4
Q31021	B-4
Q31022	B-4
Q31023	B-4
Q31024	C-5
Q31025	C-5
Q31026	B-5
Q31027	C-5
Q31028	C-5
Q31029	A-4
Q31030	A-4
Q31031	B-5
Q31032	A-5
Q31033	A-5
Q31034	A-5
Q31035	C-3
Q31036	C-3
Q31037	A-4
Q31038	B-4
Q31039	B-4
Q31040	B-1
Q31041	B-2
Q31042	B-3
Q31043	B-3
Q31044	C-3
Q31045	B-2
Q31046	B-2
Q31047	B-2
Q31048	C-3
Q31049	C-2
Q31050	C-2
Q31051	B-2
Q31053	D-3
Q31055	D-2
Transitor & Resistor	
QR30001	A-7
QR30002	A-7
QR30003	A-6
QR30004	A-6
QR30005	A-6
QR30006	A-6
QR30007	C-6
QR30008	B-7
QR30009	B-7
QR30010	C-7
QR30011	C-8
QR30012	B-8
QR30014	D-8
QR30015	D-8
QR30016	C-8
QR30017	C-8
QR30018	E-6
QR30019	C-4
QR30021	E-9
QR30022	A-9
QR30023	A-9
QR30024	E-8
QR30025	B-8
QR30026	A-5
QR30027	A-9
QR30028	B-1
QR30029	B-1
QR30030	C-8
QR30031	C-6
QR30032	B-9
QR31001	C-4
QR31002	C-4
QR31003	B-4
QR31005	B-4
QR31006	B-3
QR31007	A-2
QR31008	D-4
QR31009	B-3
QR31010	B-3
QR31011	D-4
QR31012	A-2
QR31013	E-4
QR31014	E-4
QR31015	C-3
QR31016	B-4
Integrated Circuit	
IC30001	C-6
IC30002	B-5
IC30003	D-7
IC30004	B-8
IC30005	A-2
IC30006	D-8
IC30007	A-8
IC30008	C-5
IC30009	B-7
IC31002	D-3
IC31003	C-4
IC31004	B-4
IC31005	A-2
IC31007	A-1
IC31008	C-1
IC31009	C-2
IC31010	A-1
IC31011	D-5
Test Point	
TP30001	B-6
TP30002	C-5
TP30003	A-6
TP30004	E-6
TP30005	C-7
TP30006	E-8
TP30007	C-5
TP30008	D-5
TP30009	D-7
TP30010	D-7
TP30011	D-3
TP30012	D-6
TP30013	C-9
TP30014	C-6
TP30015	C-7
TP31001	C-2
TP31002	C-2
TP31004	E-4
TP31006	C-5
TP31007	A-5
TP31008	A-5
TP31009	C-7
TP31010	C-1
TP31011	A-2
TPG30001	E-8
TPG30002	A-8
TPG31003	B-3
Adjustment	
VR30001	D-4
VR30002	B-6
VR30003	B-6
VR30004	B-6
VR30005	B-6
VR30006	C-6
VR30007	B-5
VR30008	C-7
VR30009	B-3
VR30010	B-8
VR30011	B-9
VR30012	B-9
VR30013	E-9
VR30015	D-8
VR30016	B-8
VR30017	B-8
VR30020	D-6
VR31008	D-3
VR31009	C-1
Connector	
P30001	A-5
P30002	A-8
P30003	A-7
P30004	D-7
P30005	A-6
P30006	D-9
P30007	D-4
P30008	B-4
P30009	B-7
P30010	A-5
P30011	C-5
P30012	A-5
P30013	B-7
P30014	A-1
P30015	D-4
P30016	D-3
P30018	E-7

ADDRESS INFORMATION

VIDEO C.B.A. (VEP03586A), S-VIDEO INPUT C.B.A. (VEP00M60A) & S-VIDEO OUTPUT C.B.A. (VEP00M66A)


E
D
C
B
A
1
2
3
4
5
6
7
VIDEO C.B.A. (VEP03586A)
VIDEO CIRCUIT
REF. NO. 30000 SERIES
VEP03586
REF. NO. 31000 SERIES
(Y/C,OSD SECTION)
REF. NO. 30000 SERIES
(VIDEO SECTION)

VIDEO INPUT C.B.A. (VEP00M60A) & S-VIDEO OUTPUT C.B.A. (VEP00M66A)

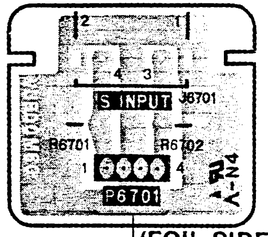

VIDEO CIRCUIT
REF. NO. 31000 SERIES (Y/C,OSD)
REF. NO. 30000 SERIES
VJB0358
VEP03586
REF. NO. 30000 SERIES
VIDEO CIRCUIT
3
4
5
6
7
8
9
10

REF. NO. 31000 SERIES
(Y/C,OSD SECTION)

REF. NO. 30000 SERIES
(VIDEO SECTION)

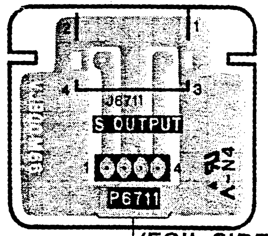
(FOIL SIDE)

S-VIDEO
INPUT C.B.A.
(VEP00M60A)


S INPUT
J6701
R6701
R6702
P6701
1
2
3
4

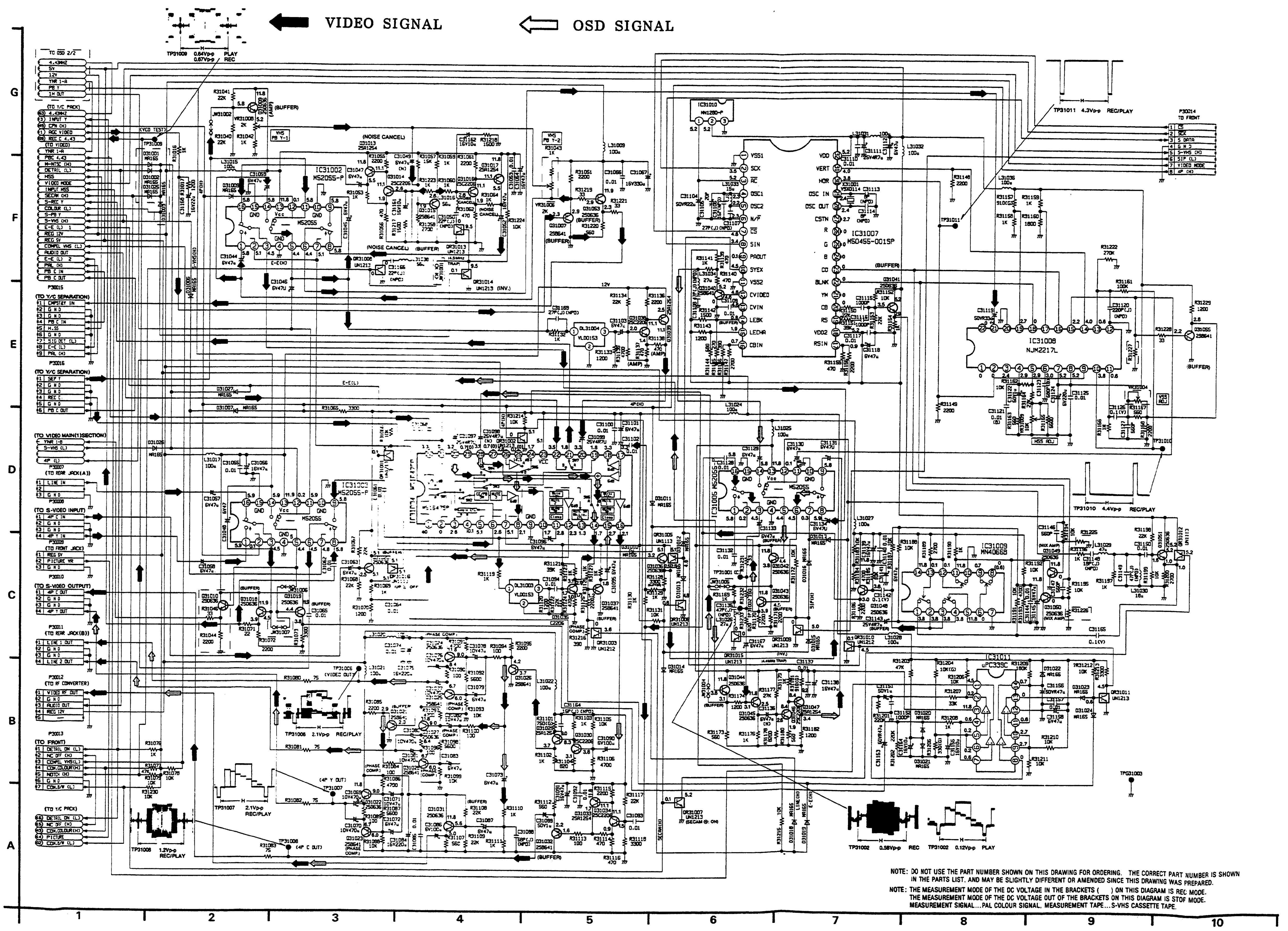
(FOIL SIDE)

S-VIDEO
OUTPUT C.B.A.
(VEP00M66A)


J6711
S OUTPUT
P6711
1
3
4

(FOIL SIDE)

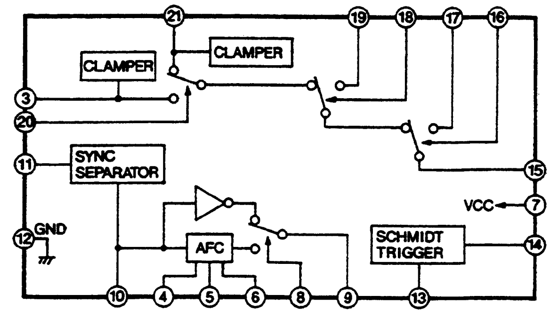
VIDEO (OSD) SCHEMATIC DIAGRAM


VIDEO SIGNAL
OSD SIGNAL
TP31009 0.64Vp-p PLAY 0.67Vp-p REC
TP31011 4.3Vp-p REC/PLAY
TP31010 4.4Vp-p REC/PLAY
TP31008 2.1Vp-p REC/PLAY
TP31007 2.1Vp-p REC/PLAY
TP31006 1.2Vp-p REC/PLAY
TP31002 0.58Vp-p REC
TP31002 0.12Vp-p PLAY
IC31002 M52055-P
IC31005 M52055-P
IC31007 M50455-001SP
IC31008 NJM2217L
IC31009 MN4066B
IC31010 MN1280-P
IC31011 uPC339C
(NOISE CANCEL)
(BUFFER)
(AMP)
(PHASE COMP)
(MIX AMP)
(TO Y/C PACK)
(TO Y/C SEPARATION)
(TO VIDEO MAIN(1)SECTION)
(TO S-VIDEO INPUT)
(TO FRONT JACK)
(TO S-VIDEO OUTPUT)
(TO REAR JACK(B))
(TO RF CONVERTER)
(TO FRONT)
(TO REAR JACK(A))
TO OSD 2/2
TO FRONT
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

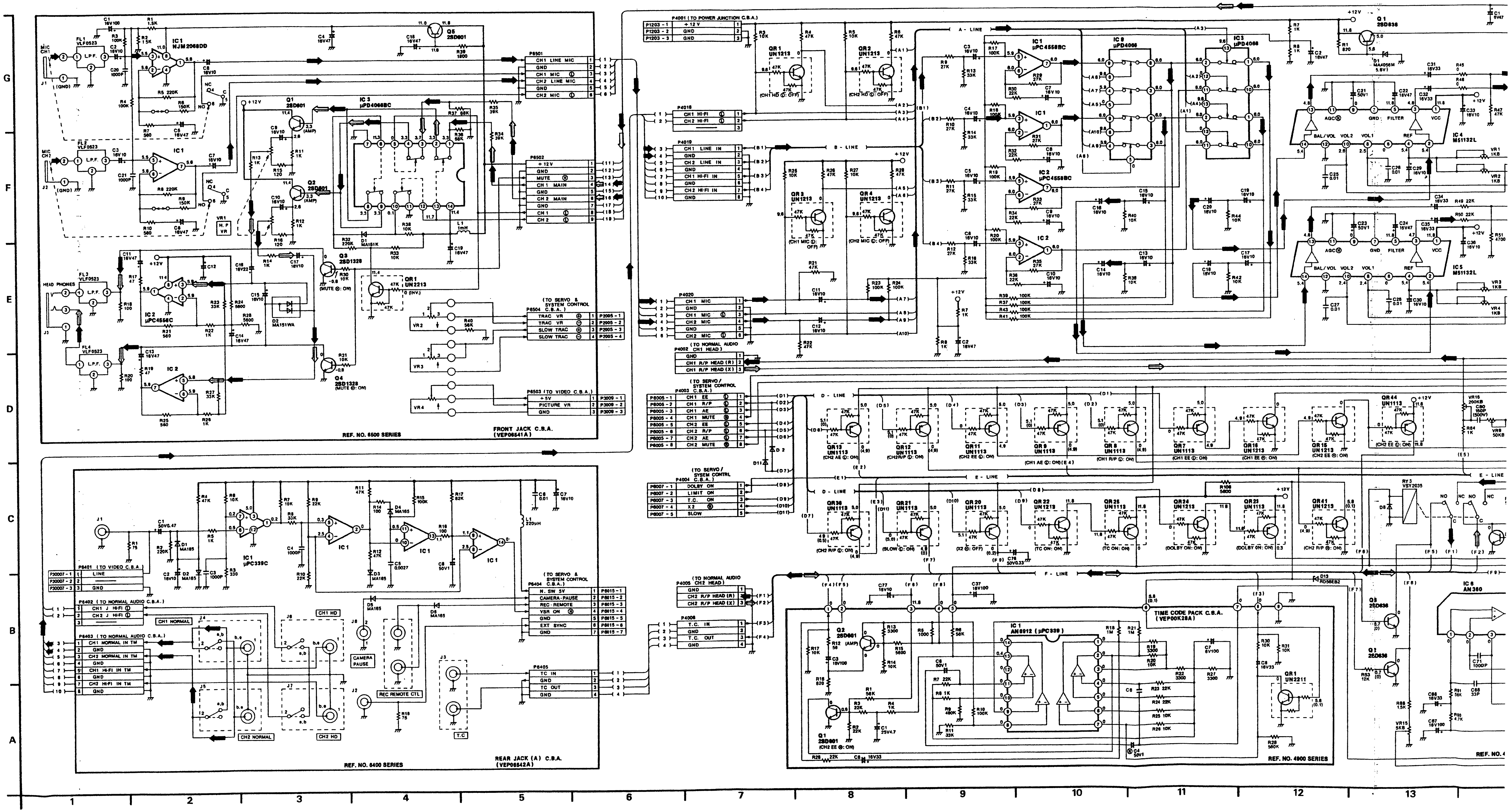
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

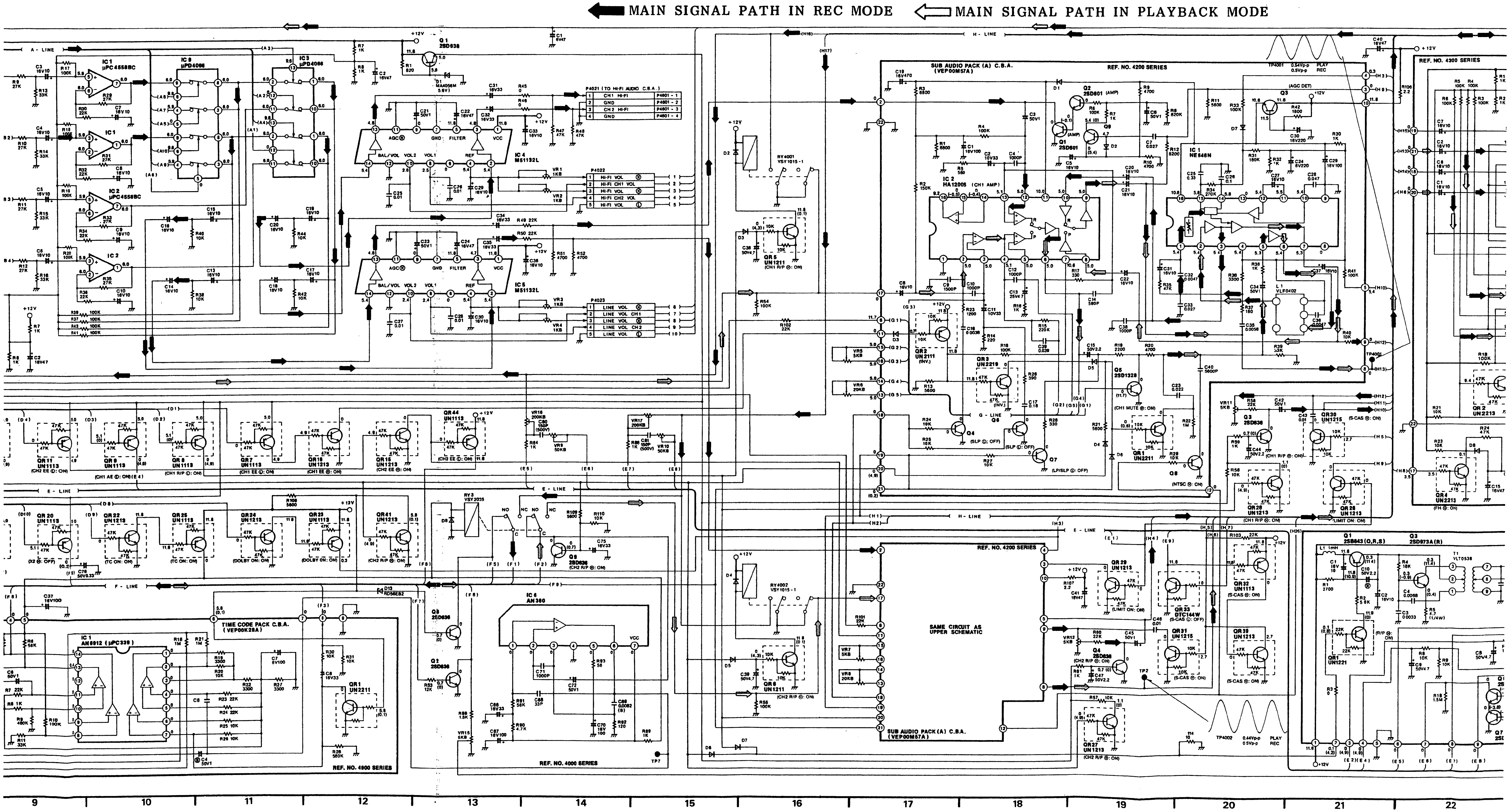
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS REC MODE. THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE. MEASUREMENT SIGNAL...PAL COLOUR SIGNAL. MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

IC31008 NJM2217L


CLAMPER
CLAMPER
SYNC SEPARATOR
AFC
SCHMIDT TRIGGER
GND
VCC
21
19
18
17
16
3
20
11
15
7
12
14
10
4
5
6
8
9
13

NORMAL AUDIO SCHEMATIC DIAGRAM


G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
MIC CH1
MIC CH2
HEAD PHONES
J1
J2
J3
IC1 NJM2068DD
IC3 μPD4066BC
IC2 μPC4558C
Q1 2SD601
Q2 2SD601
Q3 2SD1328
Q4 2SD1328
Q5 2SD601
QR1 UN2213
(MUTE Ⓗ: ON)
P8501
P8502
P8503 (TO VIDEO C.B.A.)
P8504 (TO SERVO & SYSTEM CONTROL C.B.A.)
TRAC VR
SLOW TRAC
+5V
PICTURE VR
GND
VR1 H.P VR
VR2
VR3
VR4
FRONT JACK C.B.A. (VEP06541A)
REF. NO. 6500 SERIES
P4001 (TO POWER JUNCTION C.B.A.)
P4018
P4019
P4020
P4002 CH1 HEAD
P4003 C.B.A.
P4004 (TO SERVO / SYSTEM CONTROL C.B.A.)
P4005 CH2 HEAD
P4006
CH1 HI-FI
CH2 HI-FI
CH1 LINE IN
CH2 LINE IN
CH1 MIC
CH2 MIC
CH1 EE
CH1 R/P
CH1 AE
CH1 MUTE
CH2 EE
CH2 R/P
CH2 AE
CH2 MUTE
DOLBY ON
LIMIT ON
T.C. ON
X2
SLOW
T.C. IN
T.C. OUT
A - LINE
B - LINE
D - LINE
E - LINE
F - LINE
IC1 μPC4558BC
IC2 μPC4558BC
IC9 μPD4066
IC3 μPD4066
IC4 M51132L
IC5 M51132L
IC6 AN360
BAL/VOL
VOL 2
VOL 1
AGC
FILTER
REF
VCC
Q1 2SD636
Q3 2SD636
RY3 VSY2035
QR44 UN1113
TIME CODE PACK C.B.A. (VEP00K28A)
IC1 AN6912 (μPC339)
QR1 UN2211
REF. NO. 4900 SERIES
J1
IC1 μPC339C
L1 220μH
P6401 (TO VIDEO C.B.A.)
LINE
P6402 (TO NORMAL AUDIO C.B.A.)
CH1 J HI-FI
CH2 J HI-FI
P6403 (TO NORMAL AUDIO C.B.A.)
CH1 NORMAL IN TM
CH2 NORMAL IN TM
CH1 HI-FI IN TM
CH2 HI-FI IN TM
P6404 (TO SERVO & SYSTEM CONTROL C.B.A.)
N. SW 5V
CAMERA·PAUSE
REC·REMOTE
VSR ON
EXT SYNC
P6405
TC IN
TC OUT
CH1 NORMAL
CH2 NORMAL
CH1 HD
CH2 HD
CAMERA PAUSE
REC REMOTE CTL
T.C
REAR JACK (A) C.B.A. (VEP06542A)
REF. NO. 6400 SERIES


MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
A - LINE
H - LINE
E - LINE
F - LINE
G - LINE
IC1 μPC4558BC
IC2 μPC4558BC
IC8 μPD4066
IC3 μPD4066
IC4 M51132L
IC5 M51132L
Q1 2SD638
P4021 (TO HI-FI AUDIO C.B.A.)
CH1 HI-FI
GND
CH2 HI-FI
P4022
HI-FI VOL
HI-FI CH1 VOL
HI-FI VOL
HI-FI CH2 VOL
P4023
LINE VOL
LINE VOL CH1
LINE VOL CH2
RY4001 VSY1015-1
RY4002 VSY1015-1
RY3 VSY2035
SUB AUDIO PACK (A) C.B.A. (VEP00M57A)
REF. NO. 4200 SERIES
IC2 HA12005 (CH1 AMP)
IC1 NE646N
TP4001 0.54Vp-p PLAY 0.5Vp-p REC
TP4002 0.44Vp-p PLAY 0.5Vp-p REC
REF. NO. 4300 SERIES
SAME CIRCUIT AS UPPER SCHEMATIC
TIME CODE PACK C.B.A. (VEP00K28A)
IC1 AN6912 (μPC339)
REF. NO. 4900 SERIES
IC6 AN360
REF. NO. 4000 SERIES
Q1 2SB643(Q,R,S)
Q3 2SD973A(R)
T1 VLT0536
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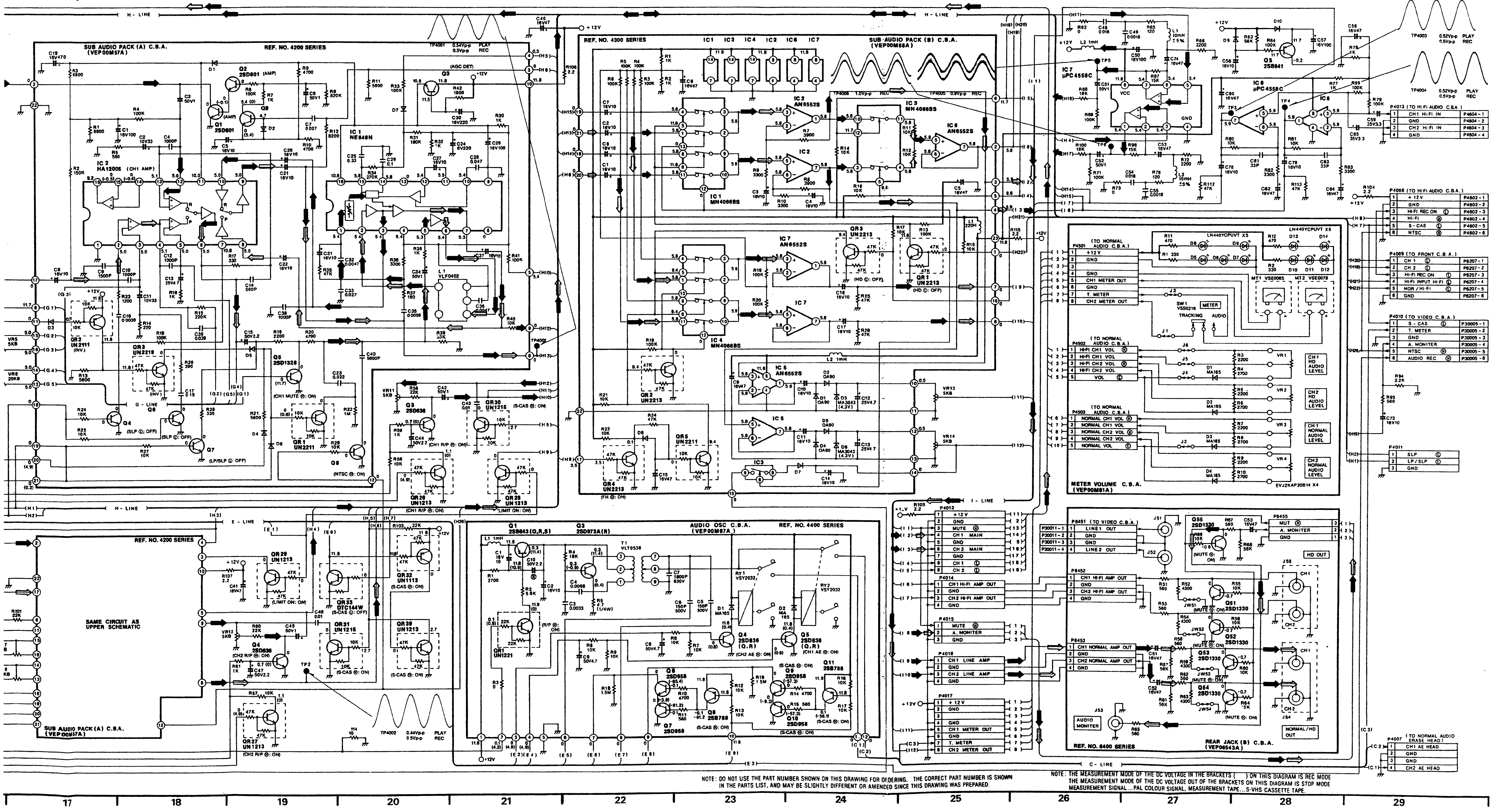
MODE ⟸ MAIN SIGNAL PATH IN PLAYBACK MODE


SUB AUDIO PACK (A) C.B.A. (VEP00M57A)
REF. NO. 4200 SERIES
SUB AUDIO PACK (B) C.B.A. (VEP00M58A)
REF. NO. 4300 SERIES
IC 1 NE648N
IC 2 HA12005 (CH1 AMP)
IC 1 MN4066BS
IC 2 AN6552S
IC 3 MN4066BS
IC 4 MN4066BS
IC 5 AN6552S
IC 6 AN6552S
IC 7 AN6552S
IC 7 μPC4558C
IC 8 μPC4558C
METER VOLUME C.B.A. (VEP00M61A)
AUDIO OSC C.B.A. (VEP00M67A)
REF. NO. 4400 SERIES
REAR JACK (B) C.B.A. (VEP06543A)
REF. NO. 6400 SERIES
SAME CIRCUIT AS UPPER SCHEMATIC
SUB AUDIO PACK (A) C.B.A. (VEP00M57A)
H - LINE
E - LINE
I - LINE
C - LINE
TP4001 0.54Vp-p PLAY 0.5Vp-p REC
TP4002 0.44Vp-p PLAY 0.5Vp-p REC
TP4003 0.52Vp-p PLAY 0.5Vp-p REC
TP4004 0.52Vp-p PLAY 0.5Vp-p REC
TP4006 1.0Vp-p REC
TP4005 0.9Vp-p REC
P4013 (TO HI-FI AUDIO C.B.A.)
P4008 (TO HI-FI AUDIO C.B.A.)
P4009 (TO FRONT C.B.A.)
P4010 (TO VIDEO C.B.A.)
P4011
P4007 (TO NORMAL AUDIO ERASE HEAD)
P4501 (TO NORMAL AUDIO C.B.A.)
P4502 (TO NORMAL AUDIO C.B.A.)
P4503 (TO NORMAL AUDIO C.B.A.)
P6451 (TO VIDEO C.B.A.)
P6452
P6453
P6455
MT1 VSE0085
MT2 VSE0078
SW1 VSS0216 METER TRACKING AUDIO
CH1 HD AUDIO LEVEL
CH2 HD AUDIO LEVEL
CH1 NORMAL AUDIO LEVEL
CH2 NORMAL AUDIO LEVEL
EVJ2KAP20B14 X4
HD OUT
AUDIO MONITER
NORMAL/HD OUT
17
18
19
20
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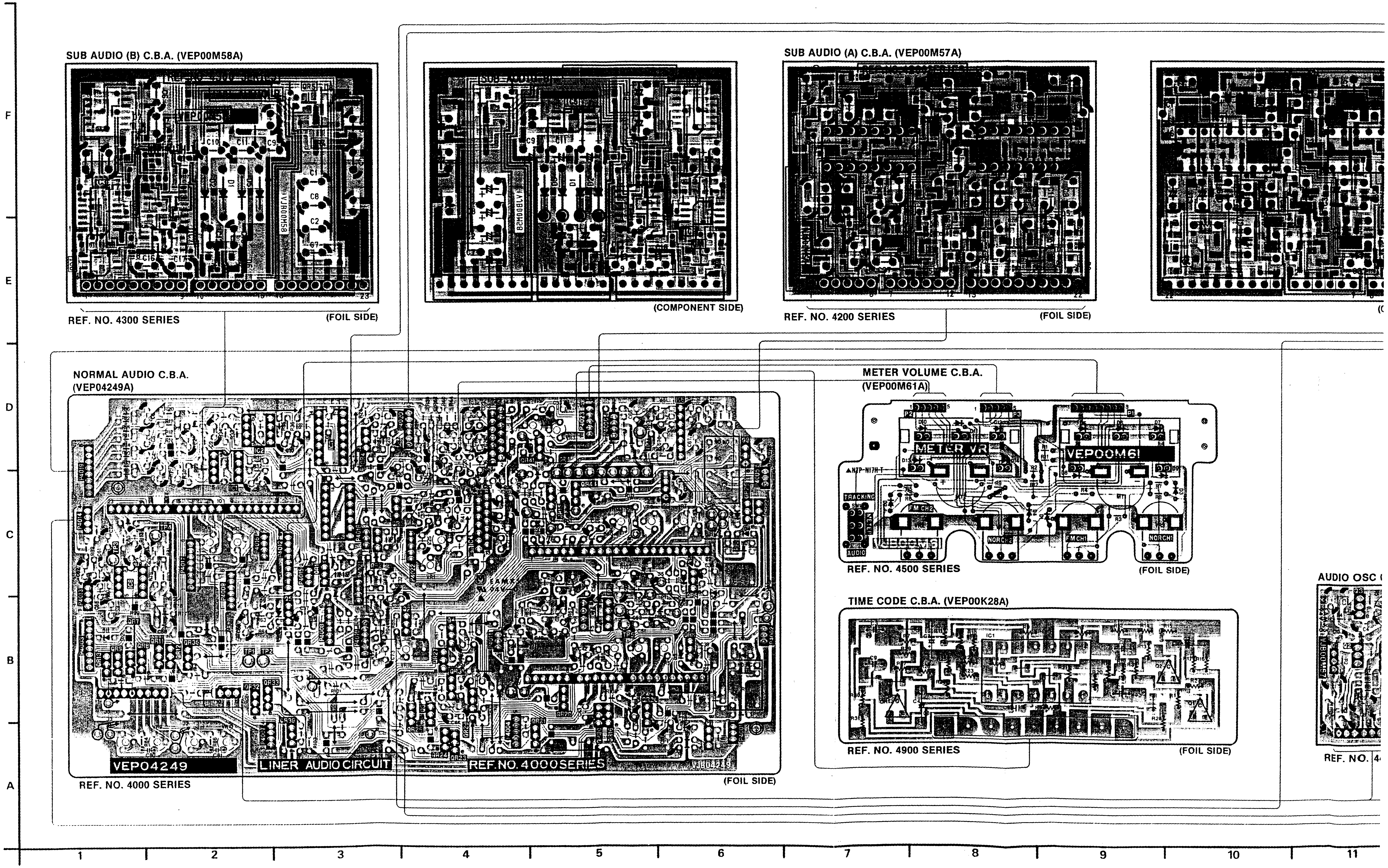
22
23
24
25
26
27
28
29

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS REC MODE
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE
MEASUREMENT SIGNAL...PAL COLOUR SIGNAL, MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

NORMAL AUDIO C.B.A. (VEP04249A), TIME CODE C.B.A. (VEP00K28A), SUB AUDIO (A) C.B.A. (VEP00K57A) , SUB AUDIO (B) C.B.A. (VE
REAR JACK (A) C.B.A. (VEP06542A), REAR JACK (B) C.B.A. (VEP06543A) & METER VOLUME C.B.A. (VEP00M61A)


F
E
D
C
B
A
SUB AUDIO (B) C.B.A. (VEP00M58A)
REF. NO. 4300 SERIES
(FOIL SIDE)
(COMPONENT SIDE)
SUB AUDIO (A) C.B.A. (VEP00M57A)
REF. NO. 4200 SERIES
(FOIL SIDE)
NORMAL AUDIO C.B.A.
(VEP04249A)
VEP04249
LINER AUDIO CIRCUIT
REF.NO.4000SERIES
REF. NO. 4000 SERIES
(FOIL SIDE)
METER VOLUME C.B.A.
(VEP00M61A)
METER VR
VEP00M61
TRACKING
AUDIO
FM CH2
NORCH2
FM CH1
NORCH1
REF. NO. 4500 SERIES
(FOIL SIDE)
TIME CODE C.B.A. (VEP00K28A)
REF. NO. 4900 SERIES
(FOIL SIDE)
AUDIO OSC
REF. NO. 4
1
2
3
4
5
6
7
8
9
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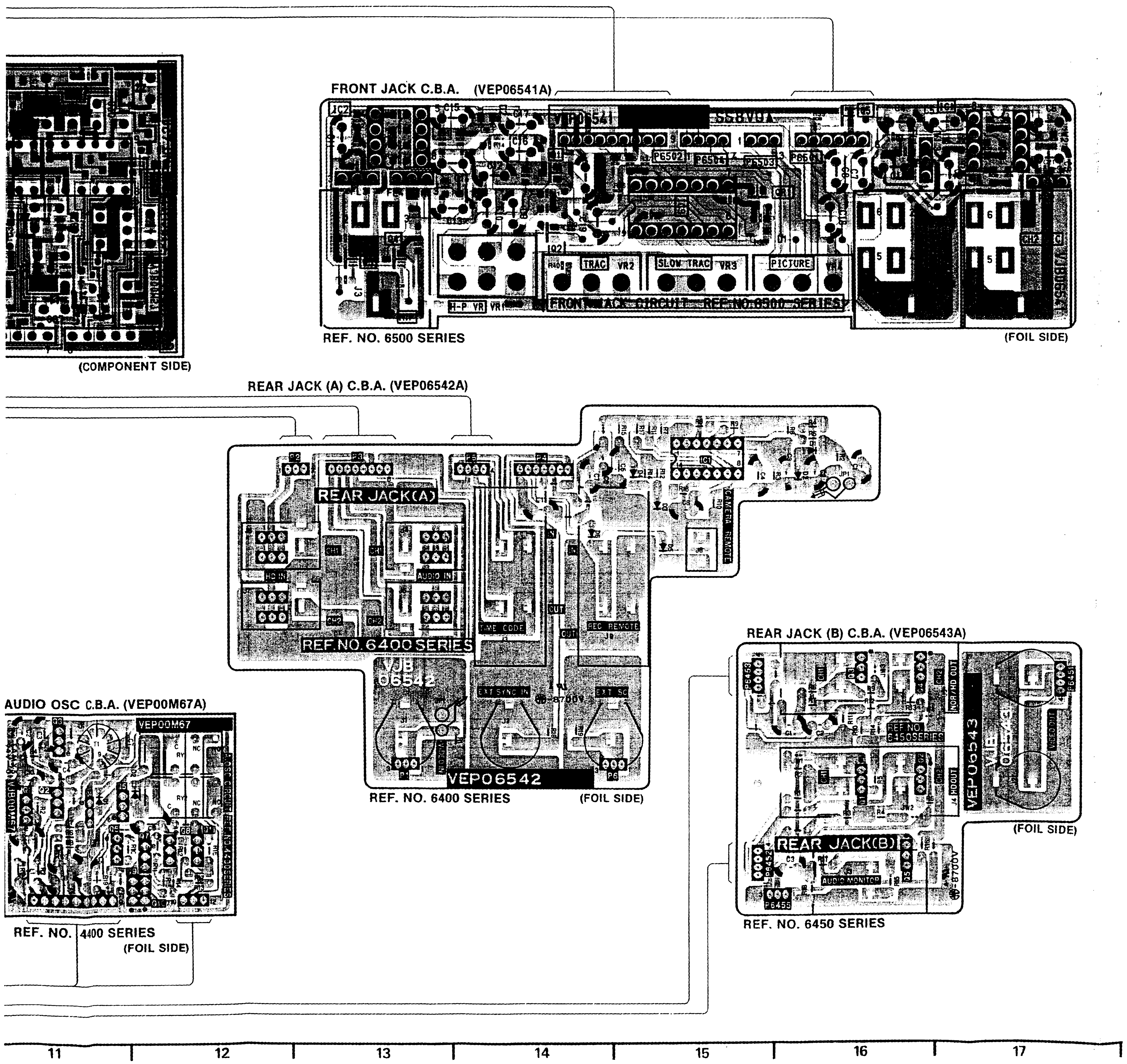
11

.A. (VEP00M58A), AUDIO OSC C.B.A. (VEP00M67A), FRONT JACK C.B.A. (VEP06541A) ,


(COMPONENT SIDE)
FRONT JACK C.B.A. (VEP06541A)
P6502
P6504
P6503
P6501
TRAC
VR2
SLOW TRAC
VR3
PICTURE
VR4
H-P VR
FRONT JACK CIRCUIT REF.NO.6500 SERIES
REF. NO. 6500 SERIES
(FOIL SIDE)
REAR JACK (A) C.B.A. (VEP06542A)
REAR JACK(A)
AUDIO IN
TIME CODE
EXT SYNC IN
EXT SC
REC REMOTE
CAMERA REMOTE
REF.NO.6400 SERIES
VJB 06542
VEP06542
B700V
REF. NO. 6400 SERIES
(FOIL SIDE)
REAR JACK (B) C.B.A. (VEP06543A)
REF.NO. 6450SERIES
VEP06543
VJB 06543
REAR JACK(B)
AUDIO MONITOR
HD OUT
NOR/HD OUT
B700V
REF. NO. 6450 SERIES
(FOIL SIDE)
AUDIO OSC C.B.A. (VEP00M67A)
VEP00M67
REF. NO. 4400 SERIES
(FOIL SIDE)
11
12
13
14
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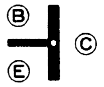
16
17

TRANSISTOR INFORMATION



FRONT JACK C.B.A.	
Transistor	
Q6501	E-14
Q6502	E-14
Q6503	E-13
Q6504	F-13
Q6505	F-16
Transistor & Resistor	
QR6501	F-16
Integrated Circuit	
IC6501	F-17
IC6502	F-13
IC6503	F-15
Adjustment	
VR6501	E-14
VR6502	E-15
VR6503	E-15
VR6504	E-16
Connector	
P6501	F-16
P6502	F-15
P6503	F-15
P6504	F-15

ADDRESS INFORMATION

REAR JACK (A) C.B.A.	
Integrated Circuit	
IC6401	D-15 Ⓕ
Connector	
P6401	B-13 Ⓕ
P6402	D-13 Ⓕ
P6403	D-13 Ⓕ
P6404	D-14 Ⓕ
P6405	D-14 Ⓕ
P6406	B-14 Ⓕ

ADDRESS INFORMATION
Ⓕ... FOIL SIDE
Ⓒ... COMPONENT SIDE

REAR JACK (B) C.B.A.	
Transistor	
Q6451	B-16
Q6452	B-16
Q6453	C-16
Q6454	C-16
Q6455	A-16
Connector	
P6451	C-17
P6452	B-15
P6453	C-15
P6455	A-16

ADDRESS INFORMATION

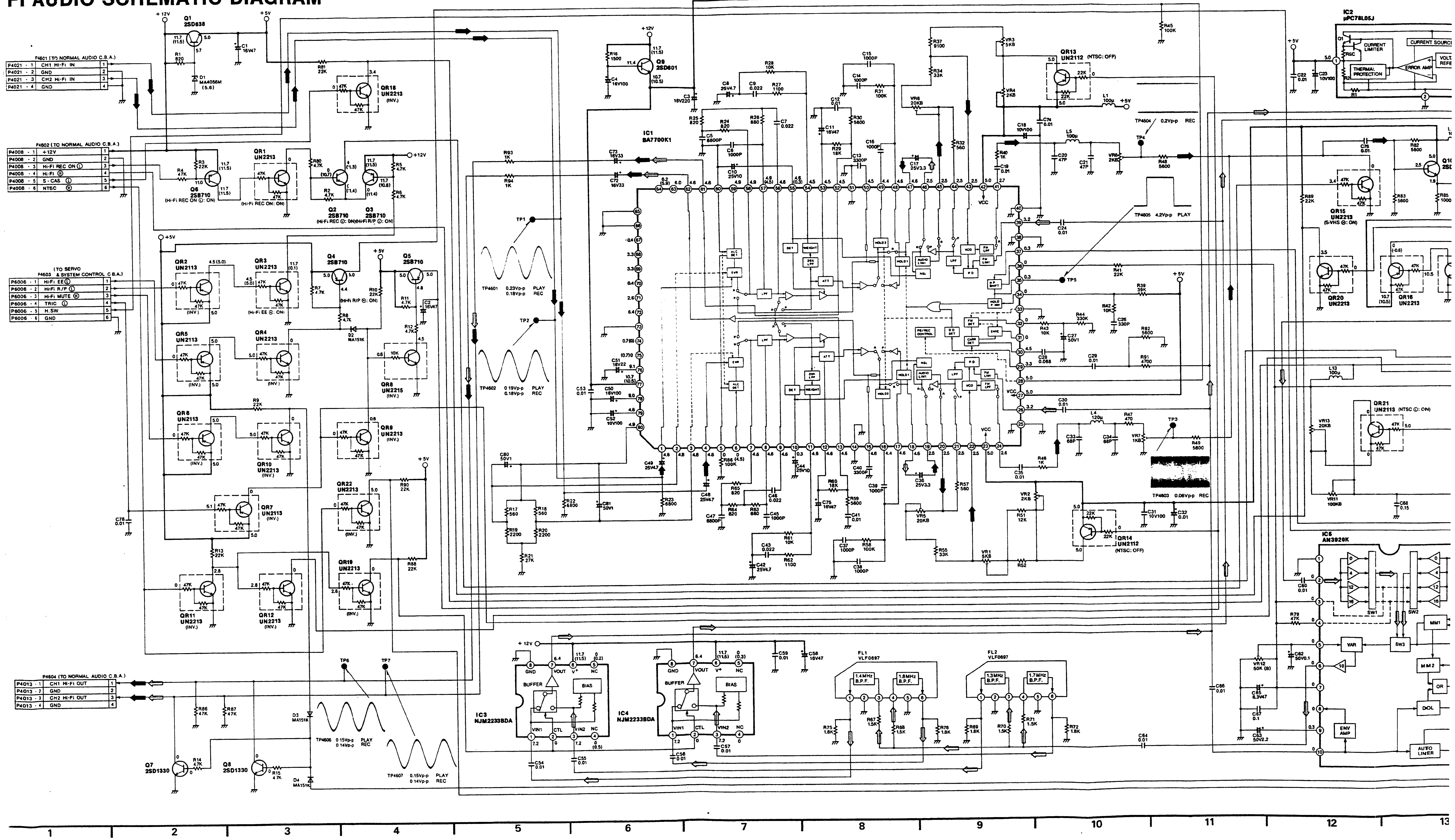
METER VOLUME C.B.A.	
Adjustment	
VR4501	C-9 Ⓕ
VR4502	C-8 Ⓕ
VR4503	C-9 Ⓕ
VR4504	C-8 Ⓕ
Connector	
P4501	D-9 Ⓕ
P4502	D-8 Ⓕ
P4503	D-8 Ⓕ

ADDRESS INFORMATION
Ⓕ... FOIL SIDE
Ⓒ... COMPONENT SIDE

NORMAL AUDIO C.B.A.	
Transistor	
Q4001	A-6 Ⓕ
Q4002	B-4 Ⓕ
Q4003	A-4 Ⓕ
Q4004	B-4 Ⓕ
Q4005	B-3 Ⓕ
Q4008	C-6 Ⓕ
Q4009	D-6 Ⓕ
Q4201	F-8 Ⓕ
Q4202	F-9 Ⓕ
Q4203	E-8 Ⓕ
Q4204	E-10 Ⓕ
Q4205	E-8 Ⓕ
Q4206	E-8 Ⓕ
Q4207	E-9 Ⓕ
Q4208	E-8 Ⓕ
Q4209	F-7 Ⓕ
Q4401	B-11 Ⓕ
Q4402	B-11 Ⓕ
Q4403	C-11 Ⓕ
Q4404	B-11 Ⓕ
Q4405	B-11 Ⓕ
Q4406	B-11 Ⓕ
Q4407	B-12 Ⓕ
Q4408	B-12 Ⓕ
Q4409	B-11 Ⓕ
Q4410	A-12 Ⓕ
Q4411	B-12 Ⓕ
Q4901	A-10 Ⓕ
Q4902	B-9 Ⓕ
Transistor & Resistor	
QR4001	C-3 Ⓕ
QR4002	C-3 Ⓕ
QR4003	C-4 Ⓕ
QR4004	D-3 Ⓕ
QR4005	B-6 Ⓕ
QR4006	B-6 Ⓕ
QR4007	B-1 Ⓕ
QR4008	B-1 Ⓕ
QR4009	B-1 Ⓕ
QR4011	B-2 Ⓕ
QR4012	B-2 Ⓕ
QR4013	B-1 Ⓕ
QR4015	C-5 Ⓕ
QR4016	A-5 Ⓕ
QR4020	A-5 Ⓕ
QR4021	A-5 Ⓕ
QR4022	C-6 Ⓕ
QR4023	A-4 Ⓕ
QR4024	A-4 Ⓕ
QR4025	C-6 Ⓕ
QR4026	A-4 Ⓕ
QR4027	B-4 Ⓕ
QR4028	A-5 Ⓕ
QR4029	A-4 Ⓕ
QR4030	A-5 Ⓕ
QR4031	B-4 Ⓕ
QR4032	B-2 Ⓕ
QR4033	B-2 Ⓕ
QR4036	B-2 Ⓕ
QR4039	A-3 Ⓕ
QR4041	D-5 Ⓕ
QR4044	C-5 Ⓕ
QR4201	E-8 Ⓕ
QR4202	E-10 Ⓕ
QR4203	E-8 Ⓕ
QR4301	E-6 Ⓒ
QR4302	F-1 Ⓕ
QR4303	F-2 Ⓕ
QR4304	F-3 Ⓕ
QR4305	F-3 Ⓕ
QR4901	B-7 Ⓕ
Integrated Circuit	
IC4001	C-2 Ⓕ
IC4002	D-2 Ⓕ
IC4003	D-3 Ⓕ
IC4004	C-4 Ⓕ
IC4005	D-4 Ⓕ
IC4006	D-6 Ⓕ
IC4007	B-5 Ⓕ
IC4008	C-1 Ⓕ
IC4009	C-3 Ⓕ
IC4201	F-7 Ⓕ
IC4201	F-11 Ⓒ
IC4202	F-8 Ⓕ
IC4202	F-10 Ⓒ
IC4301	F-6 Ⓒ
IC4302	E-6 Ⓒ
IC4303	F-1 Ⓕ
IC4304	E-5 Ⓒ
IC4305	F-5 Ⓒ
IC4306	E-1 Ⓕ
IC4307	E-2 Ⓕ
IC4901	B-8 Ⓕ
Test Point	
TP4001	B-2 Ⓕ
TP4002	B-2 Ⓕ
TP4003	C-1 Ⓕ
TP4004	C-2 Ⓕ
TP4005	B-5 Ⓕ
TP4006	B-5 Ⓕ
TP4007	D-5 Ⓕ
Adjustment	
VR4001	C-4 Ⓕ
VR4002	C-4 Ⓕ
VR4003	D-5 Ⓕ
VR4004	D-5 Ⓕ
VR4005	B-6 Ⓕ
VR4006	B-5 Ⓕ
VR4007	C-6 Ⓕ
VR4008	C-5 Ⓕ
VR4009	A-2 Ⓕ
VR4010	A-2 Ⓕ
VR4011	B-5 Ⓕ
VR4012	C-5 Ⓕ
VR4013	C-2 Ⓕ
VR4014	C-2 Ⓕ
VR4015	B-4 Ⓕ
VR4016	A-1 Ⓕ
VR4017	A-2 Ⓕ
Connector	
P4001	A-6 Ⓕ
P4002	B-6 Ⓕ
P4003	B-1 Ⓕ
P4004	A-4 Ⓕ
P4005	C-6 Ⓕ
P4006	D-5 Ⓕ
P4007	A-2 Ⓕ
P4008	B-3 Ⓕ
P4009	B-2 Ⓕ
P4010	B-3 Ⓕ
P4011	B-4 Ⓕ
P4012	C-3 Ⓕ
P4013	B-1 Ⓕ
P4014	C-1 Ⓕ
P4015	C-3 Ⓕ
P4016	C-2 Ⓕ
P4017	C-2 Ⓕ
P4018	C-3 Ⓕ
P4019	C-1 Ⓕ
P4020	D-4 Ⓕ
P4021	C-3 Ⓕ
P4022	C-4 Ⓕ
P4023	D-5 Ⓕ

ADDRESS INFORMATION
Ⓕ... FOIL SIDE
Ⓒ... COMPONENT SIDE

Fi AUDIO SCHEMATIC DIAGRAM


P4021 (TO NORMAL AUDIO C.B.A.)
CH1 Hi-Fi IN
GND
CH2 Hi-Fi IN
P4802 (TO NORMAL AUDIO C.B.A.)
+12V
Hi-Fi REC ON
S-CAS
NTSC
P4603 (TO SERVO & SYSTEM CONTROL C.B.A.)
Hi-Fi EE
Hi-Fi R/P
Hi-Fi MUTE
TRIC
H.SW
P4604 (TO NORMAL AUDIO C.B.A.)
CH1 Hi-Fi OUT
CH2 Hi-Fi OUT
Q1 2SD638
Q2 2SB710
Q3 2SB710
Q4 2SB710
Q5 2SB710
Q6 2SB710
Q7 2SD1330
Q8 2SD1330
Q9 2SD601
QR1 UN2213
QR2 UN2113
QR3 UN2213
QR4 UN2213
QR5 UN2113
QR6 UN2113
QR7 UN2113
QR8 UN2215
QR9 UN2213
QR10 UN2213
QR11 UN2213
QR12 UN2213
QR13 UN2112 (NTSC: OFF)
QR14 UN2112 (NTSC: OFF)
QR15 UN2213 (S-VHS: ON)
QR16 UN2213
QR18 UN2213
QR19 UN2213
QR20 UN2213
QR21 UN2113 (NTSC: ON)
QR22 UN2213
IC1 BA7700K1
IC2 µPC78L05J
IC3 NJM2233BDA
IC4 NJM2233BDA
IC5 AN3920K
FL1 VLF0697
FL2 VLF0697
1.4MHz B.P.F.
1.8MHz B.P.F.
1.3MHz B.P.F.
1.7MHz B.P.F.
BUFFER
BIAS
CURRENT LIMITER
THERMAL PROTECTION
ERROR AMP
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP4601 0.23Vp-p PLAY 0.18Vp-p REC
TP4602 0.19Vp-p PLAY 0.18Vp-p REC
TP4603 0.06Vp-p REC
TP4604 0.2Vp-p REC
TP4605 4.2Vp-p PLAY
TP4606 0.15Vp-p PLAY 0.14Vp-p REC
TP4607 0.15Vp-p PLAY 0.14Vp-p REC
D1 MA4056M (5.6)
D2 MA151K
D3 MA151K
D4 MA151K
ENV AMP
AUTO LINER
DOL
VAR
SW1
SW2
SW3
MM1
MM2
1
2
3
4
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6
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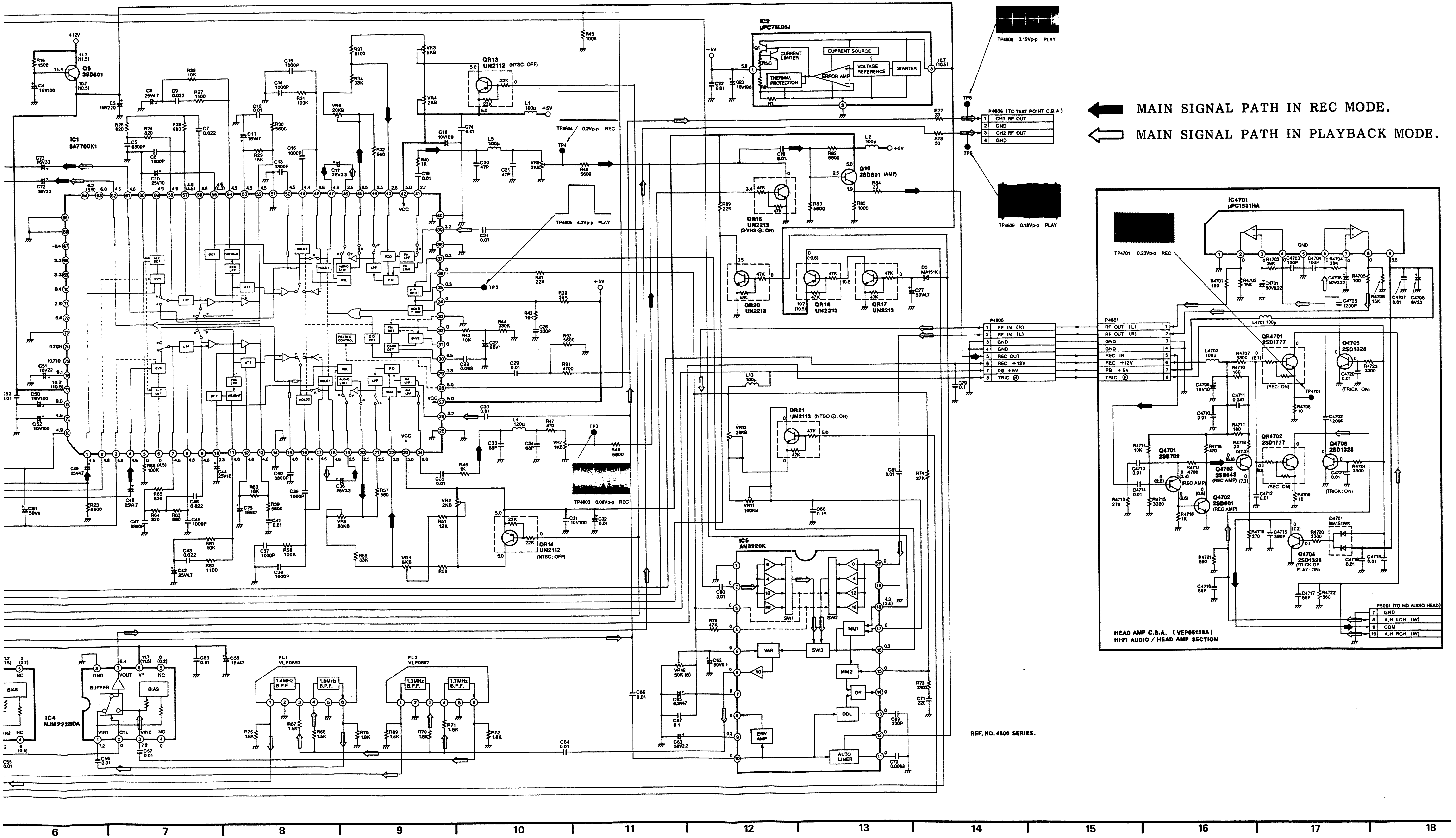
12
13

MAIN SIGNAL PATH IN REC MODE.
MAIN SIGNAL PATH IN PLAYBACK MODE.
IC1 BA7700K1
IC2 μPC78L05J
CURRENT SOURCE
CURRENT LIMITER
THERMAL PROTECTION
ERROR AMP
VOLTAGE REFERENCE
STARTER
Q9 2SD601
QR13 UN2112 (NTSC: OFF)
QR14 UN2112 (NTSC: OFF)
QR15 UN2213 (S-VHS ⓔ: ON)
QR16 UN2213
QR17 UN2213
QR20 UN2213
QR21 UN2113 (NTSC ⓔ: ON)
Q10 2SD601 (AMP)
D5 MA151K
TP3
TP4
TP5
TP4604 0.2Vp-p REC
TP4605 4.2Vp-p PLAY
TP4603 0.06Vp-p REC
TP4608 0.12Vp-p PLAY
TP4609 0.18Vp-p PLAY
TP4701 0.23Vp-p REC
TP8
TP9
P4606 (TO TEST POINT C.B.A.)
1 CH1 RF OUT
2 GND
3 CH2 RF OUT
4 GND
P4605
1 RF IN (R)
2 RF IN (L)
3 GND
4 GND
5 REC OUT
6 REC +12V
7 PB +5V
8 TRIC ⓔ
P4801
RF OUT (L)
RF OUT (R)
GND
GND
REC IN
REC +12V
PB +5V
TRIC ⓔ
IC4 NJM2233BDA
BUFFER
BIAS
GND
VOUT
V+
NC
VIN1
CTL
VIN2
FL1 VLF0697
1.4MHz B.P.F.
1.8MHz B.P.F.
FL2 VLF0697
1.3MHz B.P.F.
1.7MHz B.P.F.
IC5 AN3920K
SW1
SW2
VAR
SW3
MM1
MM2
OR
DOL
ENV AMP
AUTO LINER
IC4701 μPC1531HA
Q4701 2SB709
Q4702 2SD601 (REC AMP)
Q4703 2SB643 (REC AMP)
Q4704 2SD1328 (TRICK OR PLAY: ON)
Q4705 2SD1328 (TRICK: ON)
Q4706 2SD1328 (TRICK: ON)
QR4701 2SD1777 (REC: ON)
QR4702 2SD1777 (REC: ON)
D4701 MA151WK
P5001 (TO HD AUDIO HEAD)
7 GND
8 A.H LCH (W)
9 COM
10 A.H RCH (W)
HEAD AMP C.B.A. (VEP05138A)
HI-FI AUDIO / HEAD AMP SECTION
REF. NO. 4600 SERIES.
6
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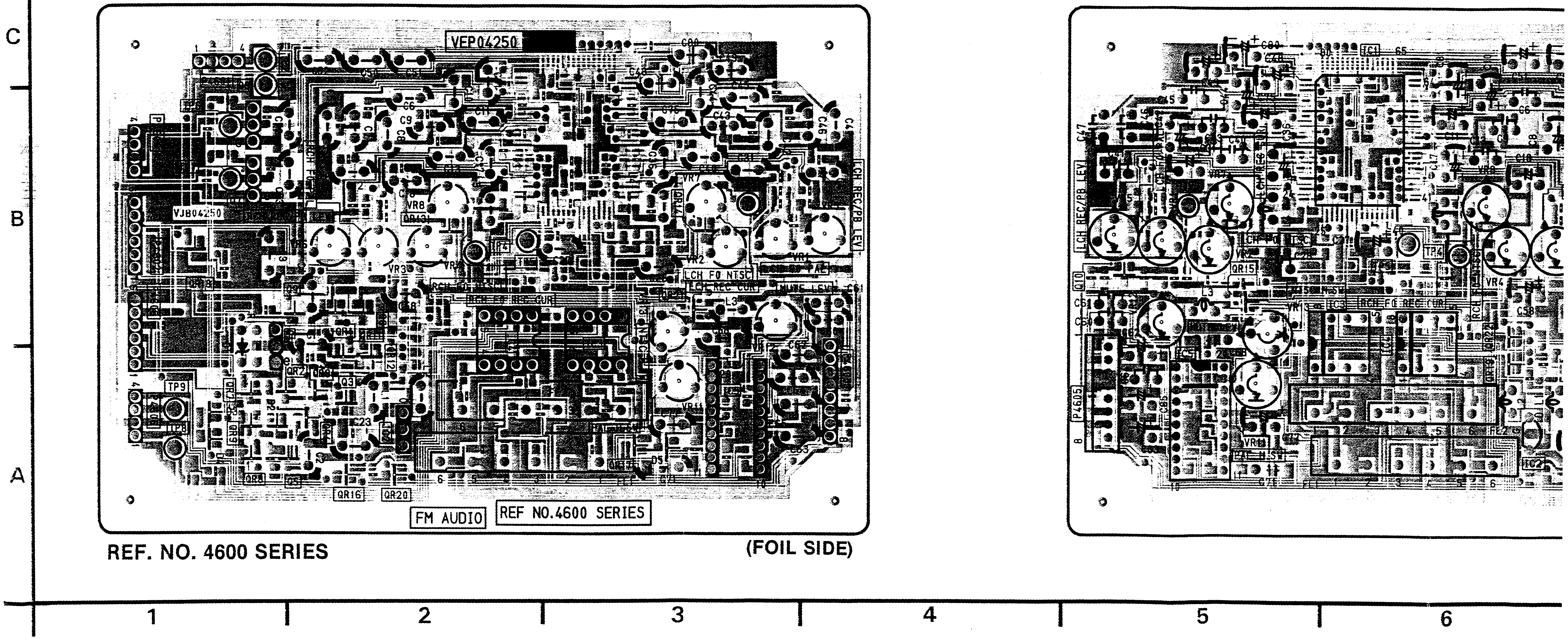
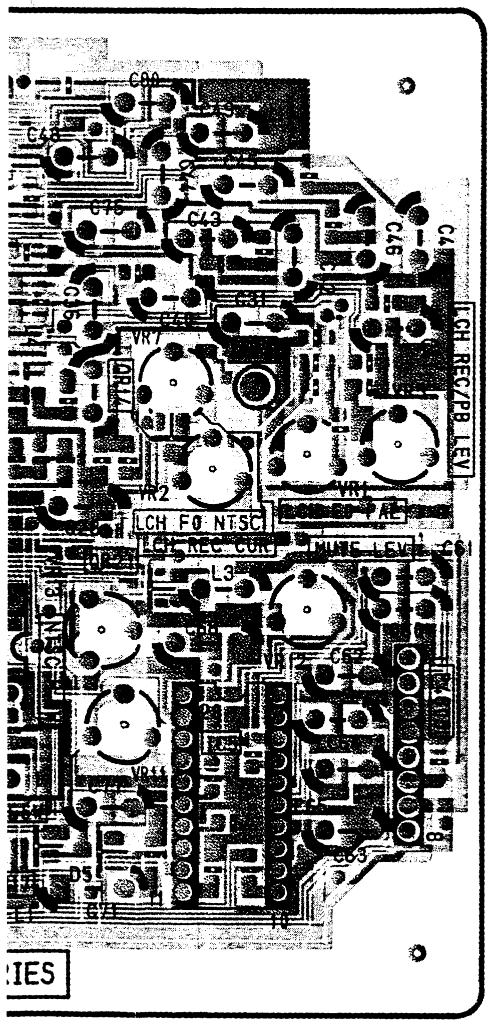
Hi-Fi AUDIO C.B.A. (VEP04250A)

Hi-Fi AUDIO C.B.A. (VEP04250A)

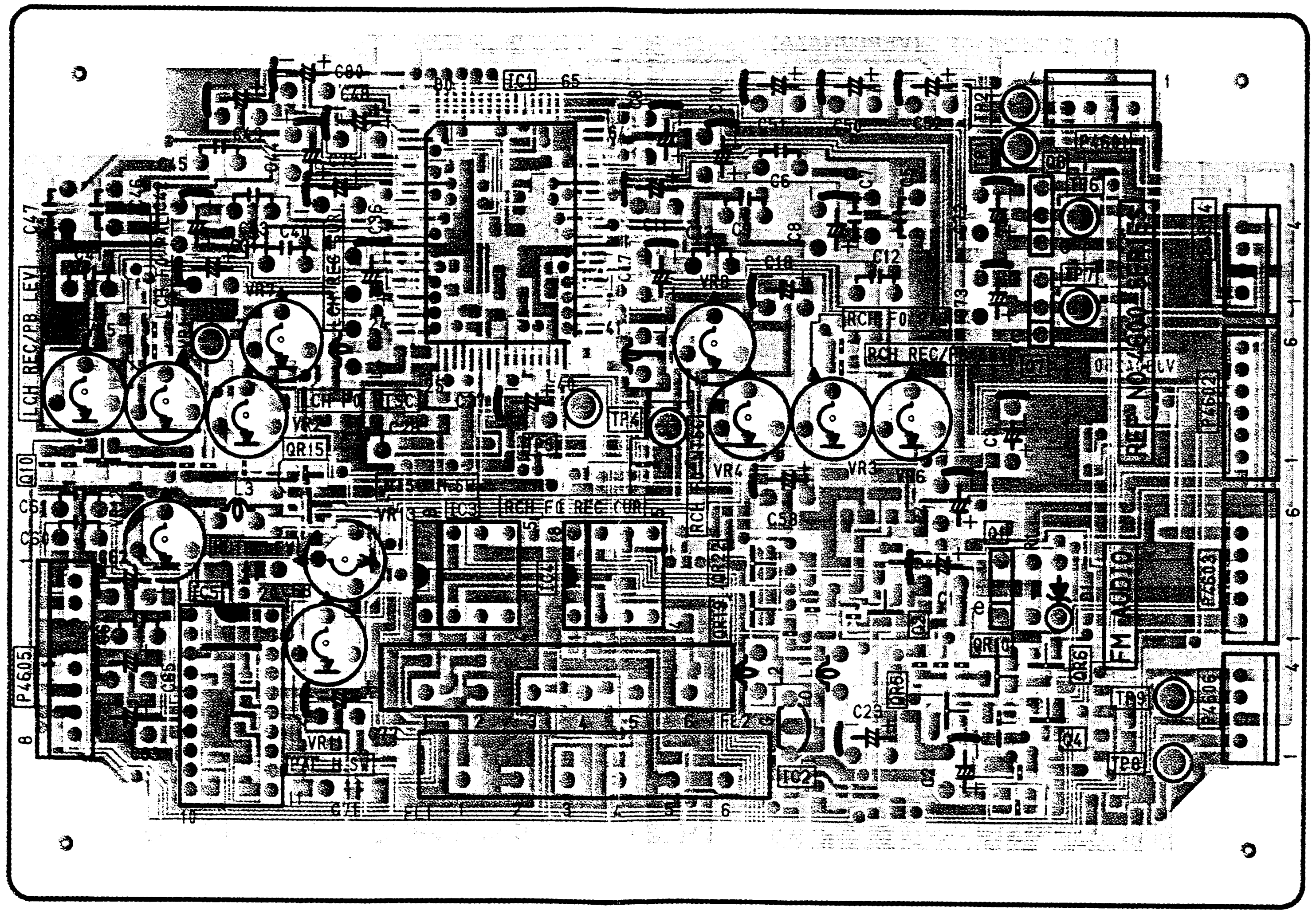

C
B
A
1
2
3
4
5
6
VEP04250
VJB04250
TP9
TP8
QR16
QR20
VR1
VR2
VR3
VR7
VR8
VR11
LCH REC/PB LEV
LCH F0 NTSC
LCH REC CUR
MUTE LEV
RCH F0 REC CUR
FM AUDIO
REF NO.4600 SERIES
P4605
IC1
IC2
C8
C9
C23
C43
C48
C58
QR15
VR4
VR13

REF. NO. 4600 SERIES

(FOIL SIDE)


LCH REC/PB LEV
LCH F0 NTSC
LCH REC CUR
MUTE LEV
VR7
VR2
VR1
VR11
L3
D5
C43
C41
IES

(FOIL SIDE)


IC1
IC2
IC3
IC4
IC5
LCH REC/PB LEV
LCH F0 NTSC
RCH F0 REC CUR
RCH REC/PB LEV
RCH F0 NTSC
QR15
VR1
VR3
VR4
VR5
VR6
VR11
L3
C47
C58
C23
P4601
P4605
P4606
TP8
TP9
FM AUDIO
1
8

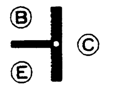
(COMPONENT SIDE)

3 4 5 6 7

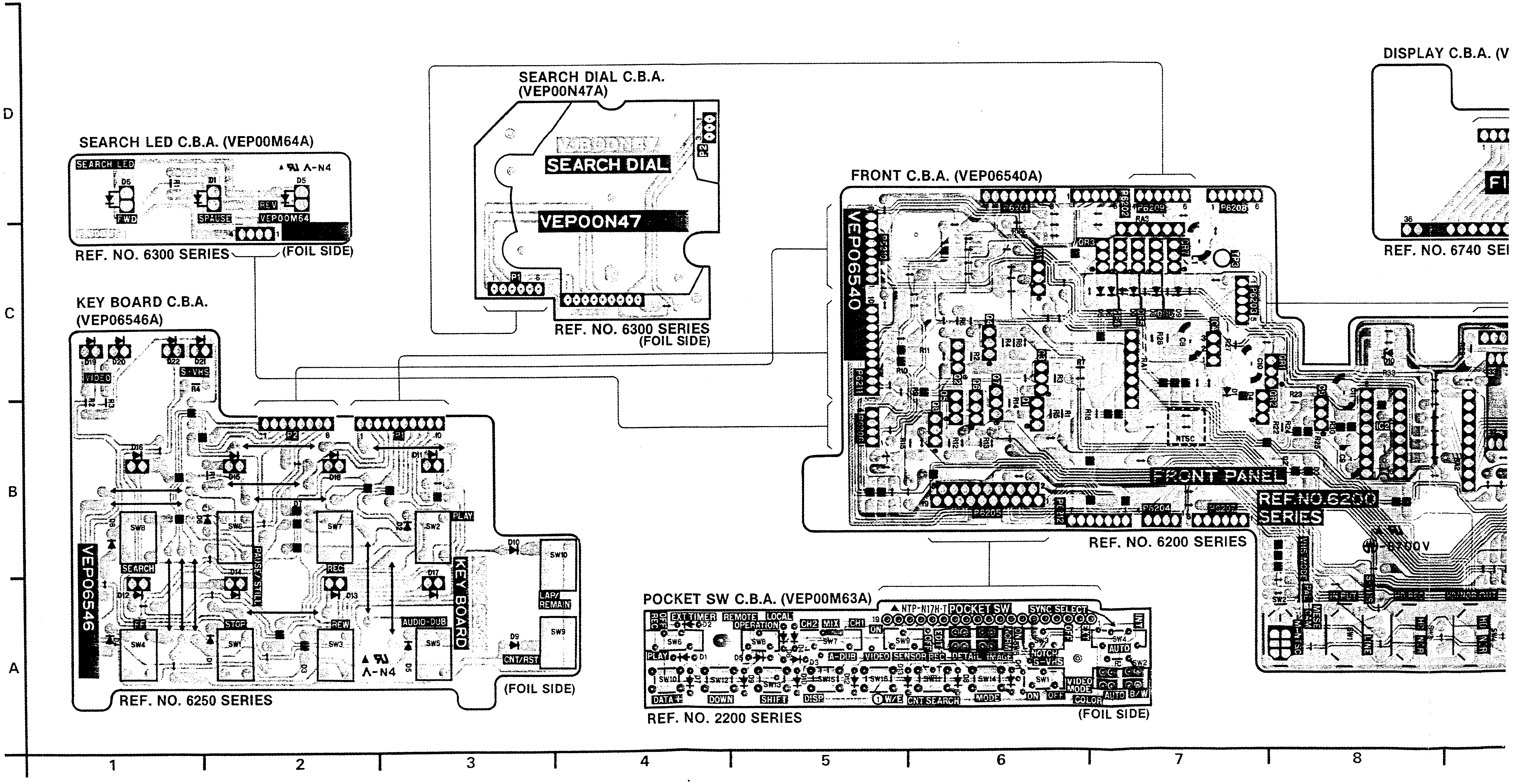
HI-FI AUDIO C.B.A.					
Transistor			TP4604	B-6	Ⓒ
Q4601	A-7	Ⓒ	TP4605	B-1	Ⓕ
Q4602	A-7	Ⓒ	TP4605	B-6	Ⓒ
Q4603	A-2	Ⓕ	TP4606	B-1	Ⓕ
Q4604	A-7	Ⓒ	TP4606	B-7	Ⓒ
Q4605	A-2	Ⓕ	TP4607	B-1	Ⓕ
Q4606	B-2	Ⓕ	TP4607	B-7	Ⓒ
Q4609	B-2	Ⓕ	TP4608	A-1	Ⓕ
Transistor & Resistor			TP4608	A-7	Ⓒ
QR4601	B-2	Ⓕ	TP4609	A-1	Ⓕ
QR4602	A-2	Ⓕ	TP4609	A-7	Ⓒ
QR4603	A-2	Ⓕ	**Adjustment**		
QR4604	A-2	Ⓕ	VR4601	B-3	Ⓕ
QR4605	A-7	Ⓒ	VR4601	B-5	Ⓒ
QR4606	A-7	Ⓒ	VR4602	B-3	Ⓕ
QR4607	A-1	Ⓕ	VR4602	B-5	Ⓒ
QR4608	A-1	Ⓕ	VR4603	B-2	Ⓕ
QR4609	A-1	Ⓕ	VR4603	B-6	Ⓒ
QR4611	A-2	Ⓕ	VR4604	B-2	Ⓕ
QR4612	A-2	Ⓕ	VR4604	B-6	Ⓒ
QR4613	B-2	Ⓕ	VR4605	B-3	Ⓕ
QR4614	B-3	Ⓕ	VR4605	B-5	Ⓒ
QR4615	B-5	Ⓒ	VR4606	B-1	Ⓕ
QR4616	A-2	Ⓕ	VR4606	B-7	Ⓒ
QR4617	A-3	Ⓕ	VR4607	B-3	Ⓕ
QR4618	B-1	Ⓕ	VR4607	B-5	Ⓒ
QR4619	A-6	Ⓒ	CR4608	B-2	Ⓕ
QR4620	A-2	Ⓕ	VR4608	B-6	Ⓒ
QR4621	B-3	Ⓕ	VR4611	A-3	Ⓕ
Integrated Circuit			VR4611	A-5	Ⓒ
IC4601	B-6	Ⓒ	VR4612	B-3	Ⓕ
IC4602	A-2	Ⓕ	VR4612	B-5	Ⓒ
IC4602	A-6	Ⓒ	VR4613	B-3	Ⓕ
IC4603	B-3	Ⓕ	VR4613	B-5	Ⓒ
IC4603	B-6	Ⓒ	**Connector**		
IC4604	B-2	Ⓕ	P4601	C-1	Ⓕ
IC4604	B-6	Ⓒ	P4601	C-7	Ⓒ
IC4605	A-3	Ⓕ	P4602	B-1	Ⓕ
IC4605	A-5	Ⓒ	P4602	B-7	Ⓒ
Test Point			P4603	B-1	Ⓕ
TP4601	B-1	Ⓕ	P4603	B-7	Ⓒ
TP4601	C-7	Ⓒ	P4604	B-1	Ⓕ
TP4602	C-1	Ⓕ	P4604	B-7	Ⓒ
TP4602	C-7	Ⓒ	P4605	A-4	Ⓕ
TP4603	B-3	Ⓕ	P4605	A-5	Ⓒ
TP4603	B-5	Ⓒ	P4606	A-1	Ⓕ
TP4604	B-2	Ⓕ	P4606	A-7	Ⓒ

ADDRESS INFORMATION
Ⓕ...FOIL SIDE
Ⓒ...COMPONENT SIDE

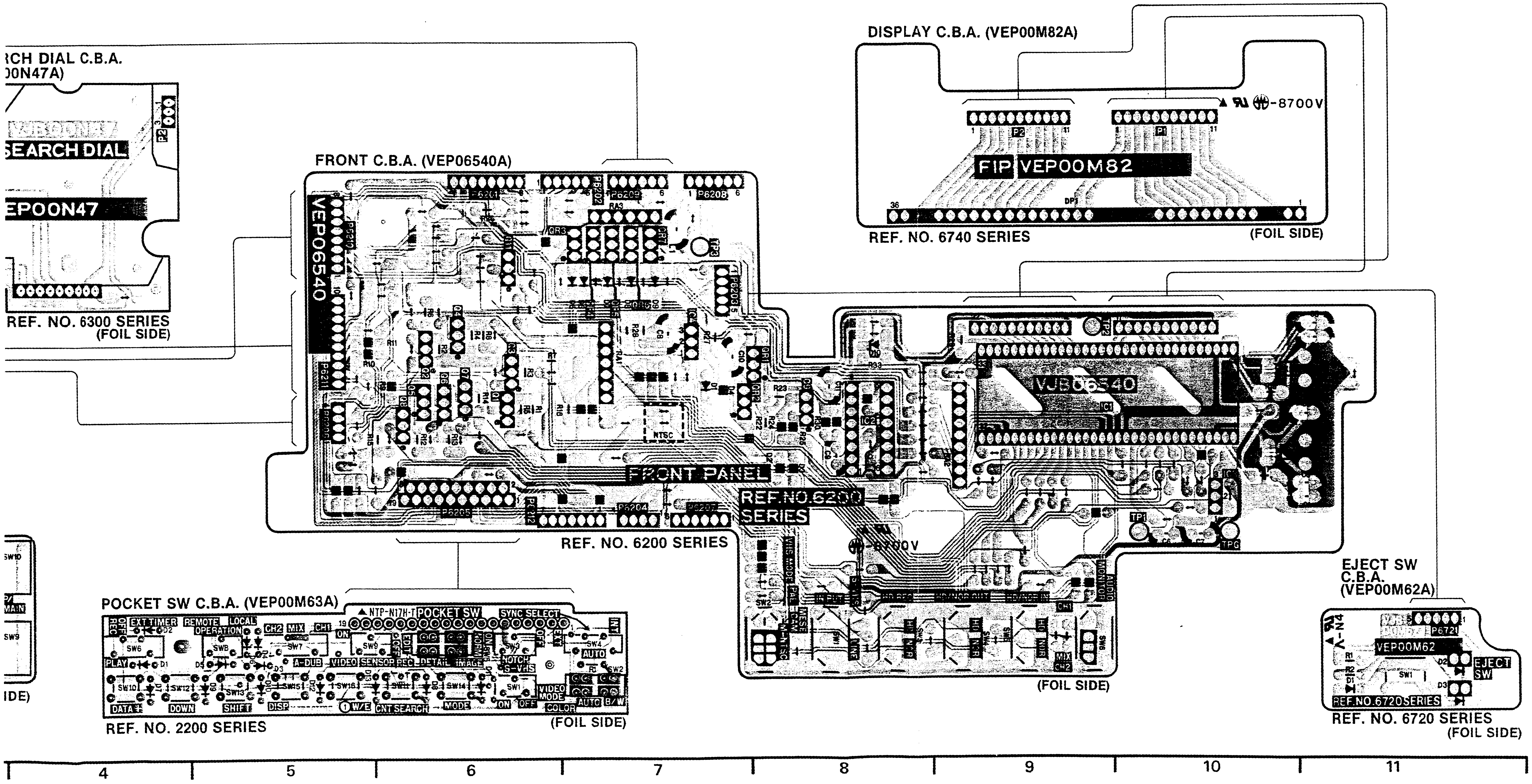
TRANSISTOR INFORMATION



FRONT C.B.A. (VEP06540A), DISPLAY C.B.A. (VEP00M82A), KEY BOARD C.B.A. (VEP06546A), POCKET SW C.B.A. (VEP00M63A), EJECT SW C.B
SEARCH DIAL C.B.A. (VEP00N47A) & SEARCH LED C.B.A. (VEP00M64A)


D
C
B
A
1
2
3
4
5
6
7
8
SEARCH LED C.B.A. (VEP00M64A)
SEARCH LED
FWD
SPAUSE
REV
VEP00M64
A-N4
REF. NO. 6300 SERIES
(FOIL SIDE)
SEARCH DIAL C.B.A.
(VEP00N47A)
SEARCH DIAL
VEP00N47
REF. NO. 6300 SERIES
(FOIL SIDE)
KEY BOARD C.B.A.
(VEP06546A)
VIDEO
S-VHS
SEARCH
PAUSE/STILL
REC
PLAY
STOP
REW
FF
AUDIO-DUB
LAP/REMAIN
CNT/RST
KEY BOARD
VEP06546
A-N4
REF. NO. 6250 SERIES
(FOIL SIDE)
FRONT C.B.A. (VEP06540A)
VEP06540
FRONT PANEL
NTSC
REF.NO.6200 SERIES
REF. NO. 6200 SERIES
POCKET SW C.B.A. (VEP00M63A)
NTP-N17H-T POCKET SW
EXT TIMER
REMOTE
LOCAL OPERATION
CH2
MIX
CH1
SYNC SELECT
PLAY
A-DUB
VIDEO
SENSOR
REC
DETAIL
IMAGE
NOTCH
S-VHS
AUTO
DATA+
DOWN
SHIFT
DISP
W/E
CNT SEARCH
MODE
ON
OFF
VIDEO MODE
COLOR
B/W
REF. NO. 2200 SERIES
(FOIL SIDE)
DISPLAY C.B.A. (V
REF. NO. 6740 SE
-37.00V

M82A), KEY BOARD C.B.A. (VEP06546A), POCKET SW C.B.A. (VEP00M63A), EJECT SW C.B.A. (VEP00M62A), C.B.A. (VEP00M64A)



RCH DIAL C.B.A.
)0N47A)
SEARCH DIAL
EPOON47
REF. NO. 6300 SERIES
(FOIL SIDE)
FRONT C.B.A. (VEP06540A)
VEP06540
FRONT PANEL
REF.NO.6200 SERIES
REF. NO. 6200 SERIES
DISPLAY C.B.A. (VEP00M82A)
FIP VEP00M82
-8700V
REF. NO. 6740 SERIES
(FOIL SIDE)
VJB06540
-8700V
(FOIL SIDE)
POCKET SW C.B.A. (VEP00M63A)
NTP-N17H-T POCKET SW
SYNC SELECT
REF. NO. 2200 SERIES
(FOIL SIDE)
EJECT SW C.B.A. (VEP00M62A)
VEP00M62
EJECT SW
REF.NO.6720SERIES
REF. NO. 6720 SERIES
(FOIL SIDE)
IDE)
4
5
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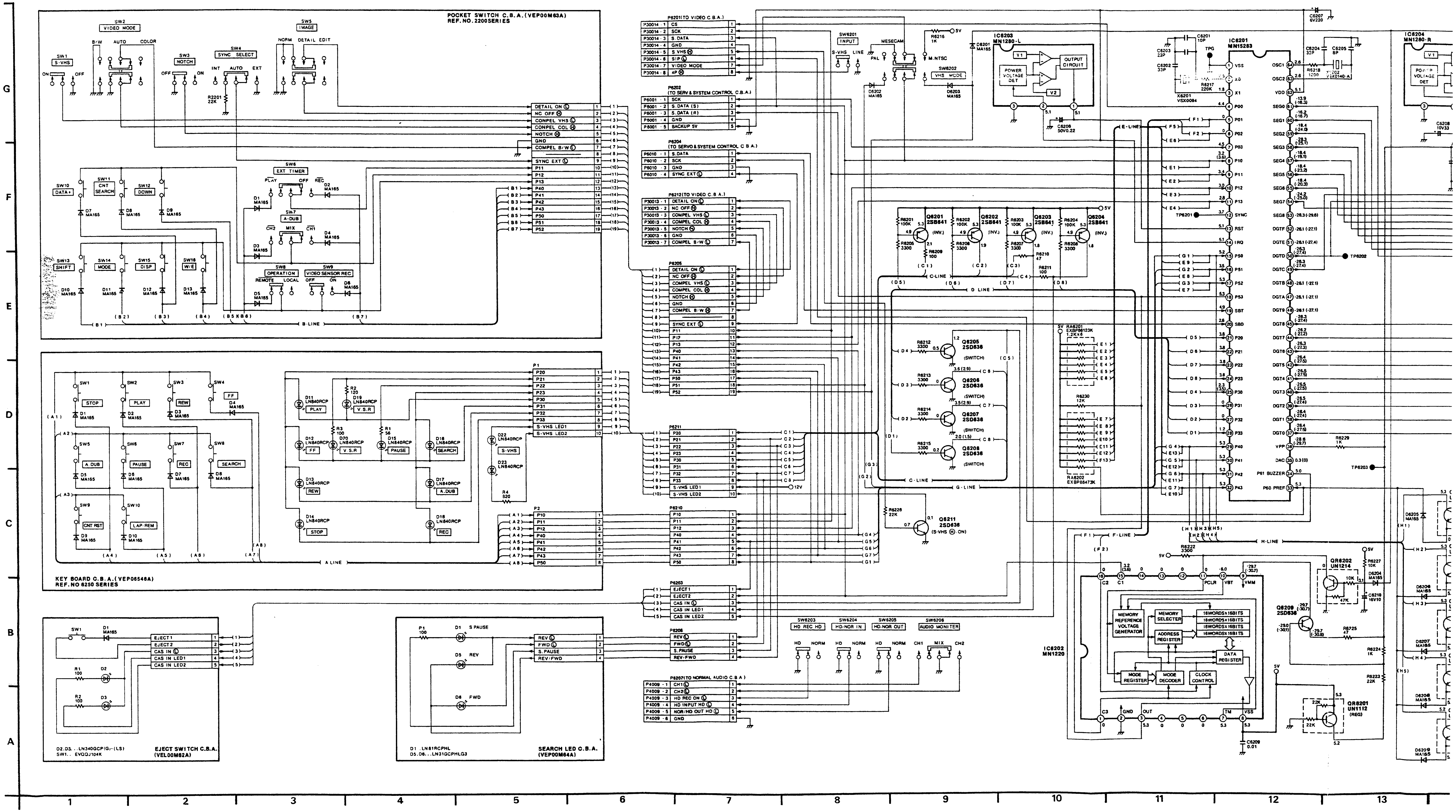
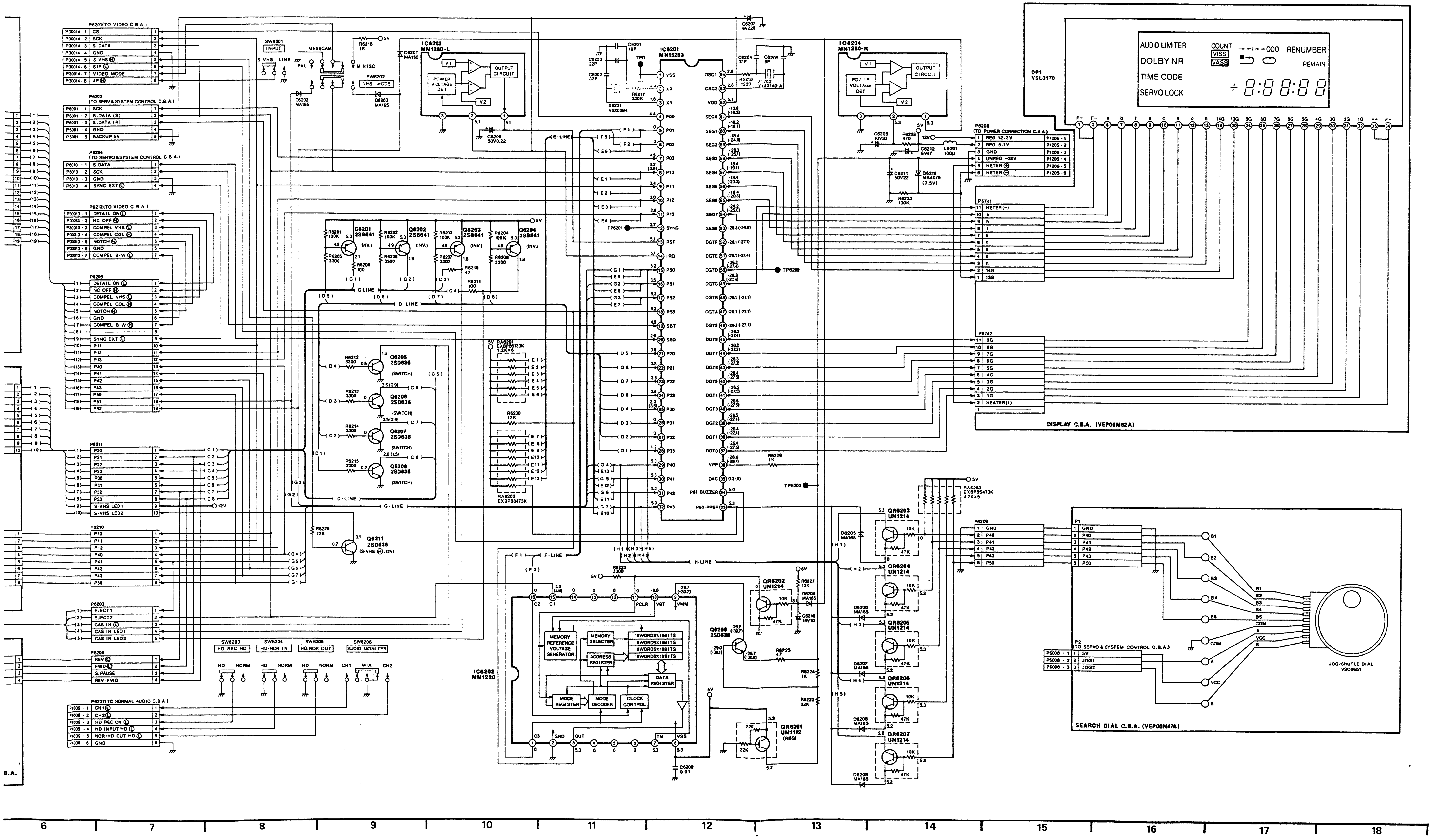
11

FRONT C.B.A., DISPLAY C.B.A., EJECT SW C.B.A., KEY BOARD C.B.A. & SEARCH DIAL C.B.A.	
Transistor	
Q6201	B-6
Q6202	C-6
Q6203	C-6
Q6204	C-6
Q6205	B-6
Q6206	B-6
Q6207	B-6
Q6208	B-6
Q6209	B-8
Q6211	C-6
Transistor & Resistor	
QR6201	C-7
QR6202	B-7
QR6203	C-7
QR6204	C-7
QR6205	C-7
QR6206	C-7
QR6207	C-7
Integrated Circuit	
IC6201	B-9
IC6202	B-8
IC6203	B-10
IC6204	C-7
Test Point	
TP6201	B-10
TP6202	C-10
TP6203	C-7
TPGND	B-10
Connector	
P6201	C-6
P6202	C-7
P6203	C-7
P6204	B-7
P6205	B-6
P6206	B-5
P6207	B-7
P6208	C-7
P6209	C-7
P6210	C-5
P6211	C-5
P6212	B-6
P6251	B-3
P6252	B-2
P6301	C-3
P6302	D-4
P6721	A-11
P6741	D-10
P6742	D-9

ADDRESS INFORMATION

FRONT SCHEMATIC DIAGRAM


POCKET SWITCH C.B.A. (VEP00M63A)
REF. NO. 2200 SERIES
SW1 S-VHS
SW2 VIDEO MODE
SW3 NOTCH
SW4 SYNC SELECT
SW5 IMAGE
SW6 EXT TIMER
SW7 A-DUB
SW8 OPERATION
SW9 VIDEO SENSOR REC
SW10 DATA+
SW11 CNT SEARCH
SW12 DOWN
SW13 SHIFT
SW14 MODE
SW15 DISP
SW16 W/E
B-LINE
KEY BOARD C.B.A. (VEP06548A)
REF. NO 6250 SERIES
STOP
PLAY
REW
FF
A.DUB
PAUSE
REC
SEARCH
CNT RST
LAP-REM
A LINE
EJECT SWITCH C.B.A.
(VEL00M62A)
D2,D3...LN340GCP(G)-(LS)
SW1...EVQQJ104K
SEARCH LED C.B.A.
(VEP00M64A)
D1...LN81RCPHL
D5,D6...LN31GCPHLG3
S PAUSE
REV
FWD
P6201 (TO VIDEO C.B.A.)
P6202 (TO SERV & SYSTEM CONTROL C.B.A.)
P6204 (TO SERVO & SYSTEM CONTROL C.B.A.)
P6212 (TO VIDEO C.B.A.)
P6205
P6211
P6210
P6203
P6208
P6207 (TO NORMAL AUDIO C.B.A.)
SW6201 INPUT
SW6202 VHS MODE
SW6203 HD REC HD
SW6204 HD-NOR IN
SW6205 HD-NOR OUT
SW6206 AUDIO MONITER
IC6203 MN1280-L
POWER VOLTAGE DET
OUTPUT CIRCUIT
Q6201 2SB641
Q6202 2SB641
Q6203 2SB641
Q6204 2SB641
Q6205 2SD636
Q6206 2SD636
Q6207 2SD636
Q6208 2SD636
Q6211 2SD636
C-LINE
D LINE
G-LINE
E-LINE
F-LINE
H-LINE
IC6201 MN15283
IC6202 MN1220
MEMORY REFERENCE VOLTAGE GENERATOR
MEMORY SELECTER
ADDRESS REGISTER
DATA REGISTER
MODE REGISTER
MODE DECODER
CLOCK CONTROL
16WORDS×16BITS
IC6204 MN1280-R
QR6201 UN1112 (REG)
QR6202 UN1214
Q6209 2SD636
RA6201 EXBP86123K
RA6202 EXBP88473K
TP6201
TP6202
TP6203
P61 BUZZER
P60 PREF
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13


P6201(TO VIDEO C.B.A.)
P6202 (TO SERVO & SYSTEM CONTROL C.B.A.)
P6204 (TO SERVO & SYSTEM CONTROL C.B.A.)
P6212(TO VIDEO C.B.A.)
P6205
P6211
P6210
P6203
P6208
P6207(TO NORMAL AUDIO C.B.A.)
SW6201 INPUT
S-VHS LINE
MESECAM
PAL
M NTSC
SW6202 VHS MODE
IC6203 MN1280-L
POWER VOLTAGE DET
OUTPUT CIRCUIT
IC6201 MN15283
IC6204 MN1280-R
DP1 VSL0170
AUDIO LIMITER
DOLBY NR
TIME CODE
SERVO LOCK
COUNT
VISS
VASS
RENUMBER
REMAIN
P6208 (TO POWER CONNECTION C.B.A.)
REG 12.3V
REG 5.1V
GND
UNREG -30V
HETER
Q6201 2SB641
Q6202 2SB641
Q6203 2SB641
Q6204 2SB641
Q6205 2SD636
Q6206 2SD636
Q6207 2SD636
Q6208 2SD636
(SWITCH)
Q6211 2SD636 (S-VHS ON)
C-LINE
D-LINE
E-LINE
F-LINE
G-LINE
H-LINE
RA6201 EXBP88123K
RA6202 EXBP88473K
RA6203 EXBP85473K
DISPLAY C.B.A. (VEP00M82A)
IC6202 MN1220
MEMORY REFERENCE VOLTAGE GENERATOR
MEMORY SELECTER
ADDRESS REGISTER
16WORDS×16BITS
DATA REGISTER
MODE REGISTER
MODE DECODER
CLOCK CONTROL
SW6203 HD REC HD
SW6204 HD-NOR IN
SW6205 HD NOR OUT
SW6206 AUDIO MONITER
HD NORM
CH1 MIX CH2
QR6201 UN1112 (REG)
QR6202 UN1214
QR6203 UN1214
QR6204 UN1214
QR6205 UN1214
QR6206 UN1214
QR6207 UN1214
Q6209 2SD636
P6209
P1
P2 (TO SERVO & SYSTEM CONTROL C.B.A.)
JOG/SHUTLE DIAL VSQ0651
SEARCH DIAL C.B.A. (VEP00N47A)
6
7
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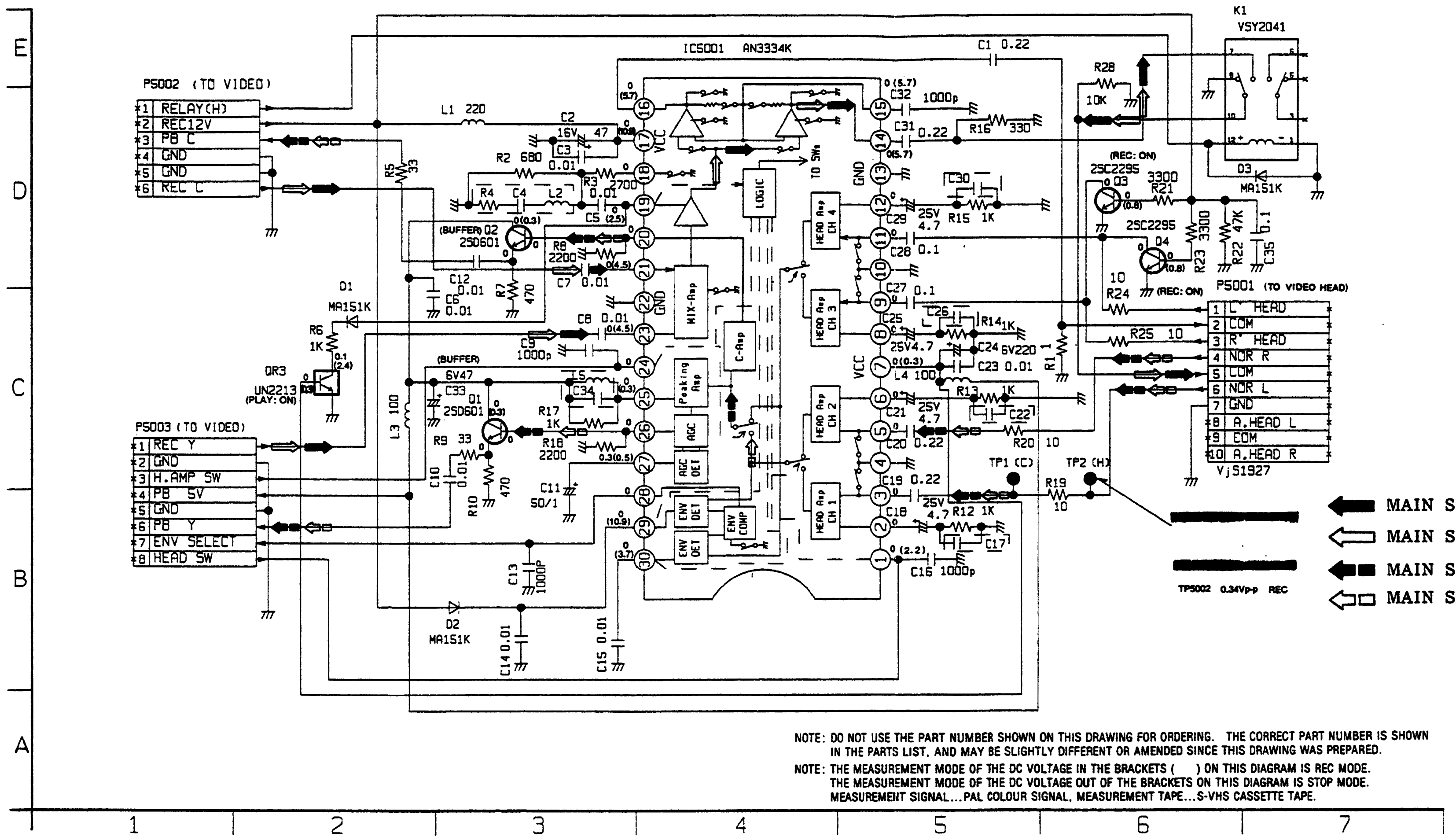
15
16
17
18

HEAD AMP SCHEMATIC DIAGRAM


IC5001 AN3334K
C1 0.22
K1 VSY2041
P5002 (TO VIDEO)
1 RELAY(H)
2 REC12V
3 PB C
4 GND
5 GND
6 REC C
P5003 (TO VIDEO)
1 REC Y
2 GND
3 H.AMP SW
4 PB 5V
5 GND
6 PB Y
7 ENV SELECT
8 HEAD SW
P5001 (TO VIDEO HEAD)
1 L' HEAD
2 COM
3 R' HEAD
4 NOR R
5 COM
6 NOR L
7 GND
8 A.HEAD L
9 COM
10 A.HEAD R
VJ51927
L1 220
(BUFFER) Q2 2SD601
(BUFFER) Q1 2SD601
QR3 UN2213 (PLAY: ON)
D1 MA151K
D2 MA151K
D3 MA151K
(REC: ON) Q3 2SC2295
Q4 2SC2295 (REC: ON)
TP1 (C)
TP2 (H)
LOGIC
MIX Amp
C-Amp
Peaking Amp
AGC
AGC DET
ENV DET
ENV COMP
HEAD Amp CH 1
HEAD Amp CH 2
HEAD Amp CH 3
HEAD Amp CH 4
VCC
GND
TO SWs
TP5002 0.34Vp-p REC
E
D
C
B
A
1
2
3
4
5
6
7

◀ MAIN SIGNAL PATH IN REC MODE(S-VHS).

⇦ MAIN SIGNAL PATH IN REC MODE(VHS).

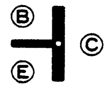
◀■ MAIN SIGNAL PATH IN PLAYBACK MODE(S-VHS).

⇦□ MAIN SIGNAL PATH IN PLAYBACK MODE(VHS).

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS REC MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE.
MEASUREMENT SIGNAL...PAL COLOUR SIGNAL, MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

TRANSISTOR INFORMATION



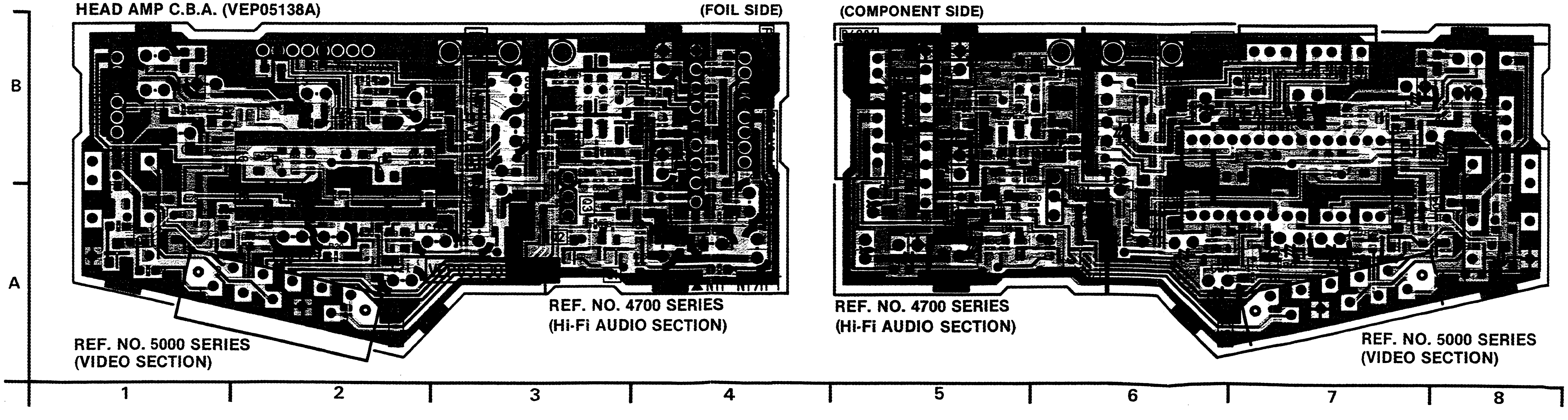
HEAD AMP C.B.A.	
Transistor	
Q4701	A-3 Ⓕ
Q4702	A-3 Ⓕ
Q4703	A-3 Ⓕ
Q4703	A-6 Ⓒ
Q4704	A-6 Ⓒ
Q4705	B-3 Ⓕ
Q4706	B-3 Ⓕ
Q5001	B-2 Ⓕ
Q5002	B-2 Ⓕ
Q5003	A-7 Ⓒ
Transitor & Resistor	
QR4701	B-3 Ⓕ
QR4702	B-3 Ⓕ
QR4703	B-5 Ⓕ
Integrated Circuit	
IC4701	B-4 Ⓕ
IC4701	A-5 Ⓒ
IC5001	A-2 Ⓕ
IC5001	A-6 Ⓒ
Test Point	
TP4701	B-3 Ⓕ
TP4701	B-6 Ⓒ
TP5001	B-3 Ⓕ
TP5001	B-6 Ⓒ
TP5002	B-3 Ⓕ
TP5002	B-6 Ⓒ
Connector	
P4701	B-4 Ⓕ
P4701	B-5 Ⓒ
P5001	A-2 Ⓕ
P5001	A-6 Ⓒ
P5002	B-1 Ⓕ
P5002	B-8 Ⓒ
P5003	B-2 Ⓕ
P5003	B-6 Ⓒ

ADDRESS INFORMATION
Ⓕ... FOIL SIDE
Ⓒ... COMPONENT SIDE

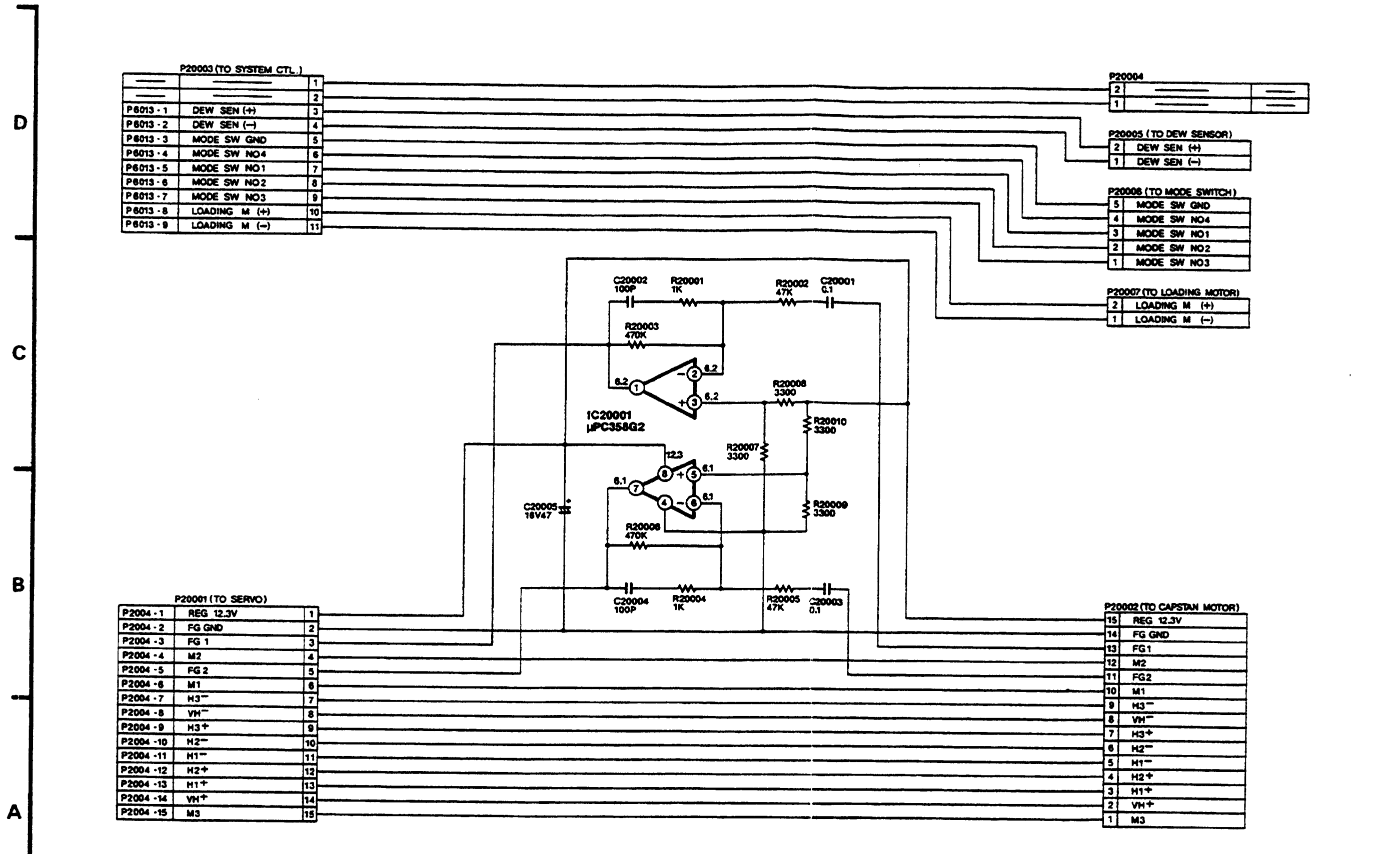
HEAD AMP C.B.A. (VEP05138A)

HEAD AMP C.B.A. (VEP05138A)

(FOIL SIDE) (COMPONENT SIDE)


REF. NO. 5000 SERIES (VIDEO SECTION)
REF. NO. 4700 SERIES (Hi-Fi AUDIO SECTION)
REF. NO. 4700 SERIES (Hi-Fi AUDIO SECTION)
REF. NO. 5000 SERIES (VIDEO SECTION)
B
A
1
2
3
4
5
6
7
8

MOTOR BASE SCHEMATIC DIAGRAM

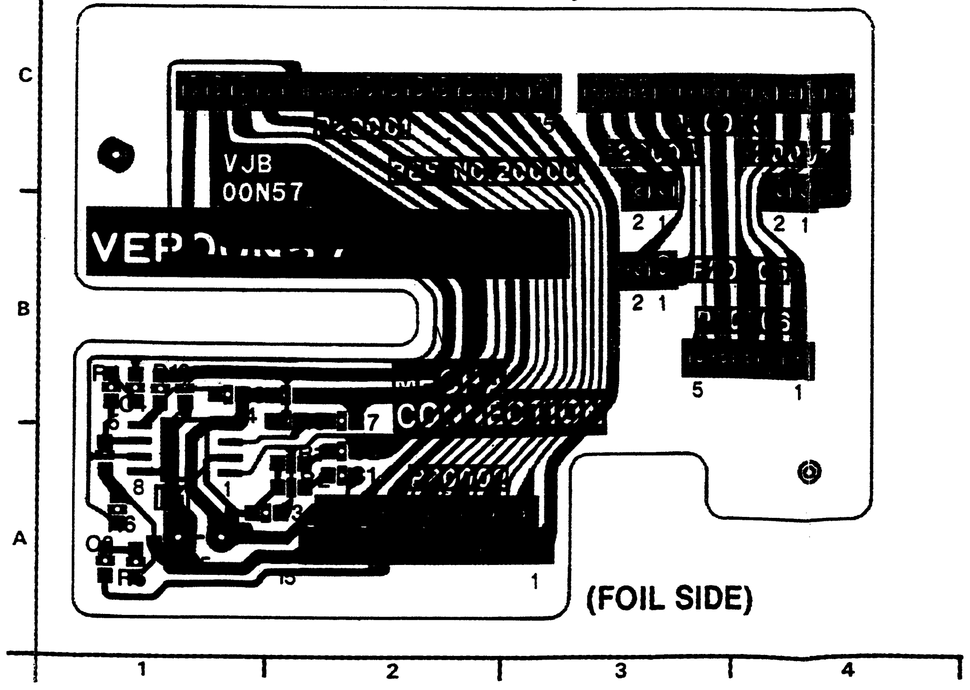

P20003 (TO SYSTEM CTL.)
P6013 - 1 DEW SEN (+) 3
P6013 - 2 DEW SEN (−) 4
P6013 - 3 MODE SW GND 5
P6013 - 4 MODE SW NO4 6
P6013 - 5 MODE SW NO1 7
P6013 - 6 MODE SW NO2 8
P6013 - 7 MODE SW NO3 9
P6013 - 8 LOADING M (+) 10
P6013 - 9 LOADING M (−) 11
P20004
P20005 (TO DEW SENSOR)
2 DEW SEN (+)
1 DEW SEN (−)
P20006 (TO MODE SWITCH)
5 MODE SW GND
4 MODE SW NO4
3 MODE SW NO1
2 MODE SW NO2
1 MODE SW NO3
P20007 (TO LOADING MOTOR)
2 LOADING M (+)
1 LOADING M (−)
C20002 100P
R20001 1K
R20002 47K
C20001 0.1
R20003 470K
6.2
IC20001
μPC358G2
R20008 3300
R20010 3300
R20007 3300
R20009 3300
12.3
6.1
C20005 16V47
R20006 470K
C20004 100P
R20004 1K
R20005 47K
C20003 0.1
P20001 (TO SERVO)
P2004 - 1 REG 12.3V 1
P2004 - 2 FG GND 2
P2004 - 3 FG 1 3
P2004 - 4 M2 4
P2004 - 5 FG 2 5
P2004 - 6 M1 6
P2004 - 7 H3− 7
P2004 - 8 VH− 8
P2004 - 9 H3+ 9
P2004 - 10 H2− 10
P2004 - 11 H1− 11
P2004 - 12 H2+ 12
P2004 - 13 H1+ 13
P2004 - 14 VH+ 14
P2004 - 15 M3 15
P20002 (TO CAPSTAN MOTOR)
15 REG 12.3V
14 FG GND
13 FG1
12 M2
11 FG2
10 M1
9 H3−
8 VH−
7 H3+
6 H2−
5 H1−
4 H2+
3 H1+
2 VH+
1 M3
D
C
B
A
1
2
3
4
5
6

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS REC MODE.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS STOP MODE.
MEASUREMENT SIGNAL...PAL COLOUR SIGNAL, MEASUREMENT TAPE...S-VHS CASSETTE TAPE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

MOTOR BASE C.B.A. (VEP00N57A)

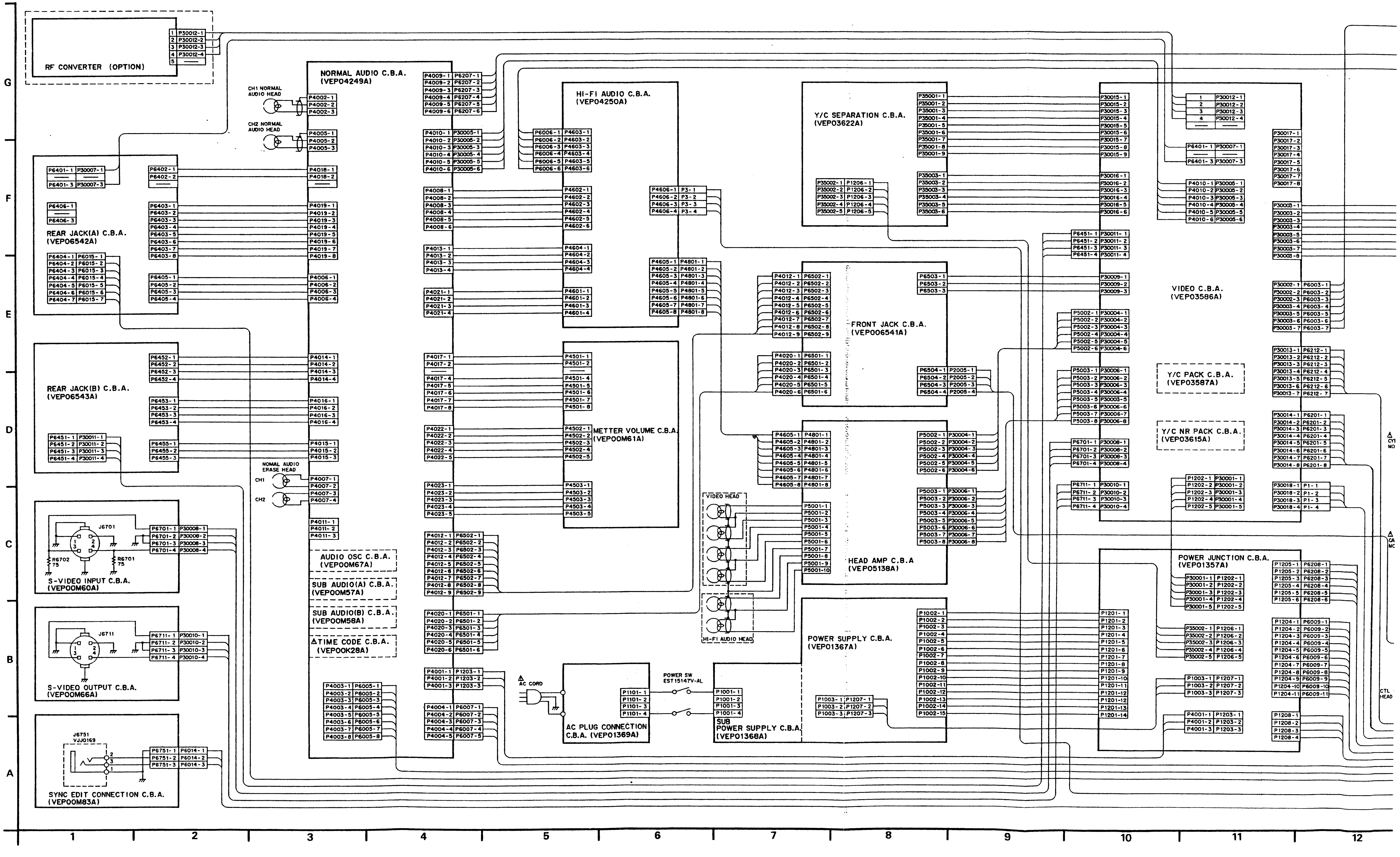
MOTOR BASE C.B.A. (VEPOON57A)


VJB
00N57
VEP
5
1
2 1
2 1
5
1
7
8
6
1
15
(FOIL SIDE)
C
B
A
1
2
3
4

MOTOR BASE C.B.A.	
Integrated Circuit	
IC20001	A-1
Connector	
P20001	C-2
P20002	A-2
P20003	C-3
P20004	C-3
P20005	B-3
P20006	B-3
P20007	C-4

ADDRESS INFORMATION

INTERCONNECTION SCHEMATIC DIAGRAM


RF CONVERTER (OPTION)
NORMAL AUDIO C.B.A. (VEP04249A)
CH1 NORMAL AUDIO HEAD
CH2 NORMAL AUDIO HEAD
HI-FI AUDIO C.B.A. (VEP04250A)
Y/C SEPARATION C.B.A. (VEP03622A)
REAR JACK(A) C.B.A. (VEP06542A)
REAR JACK(B) C.B.A. (VEP06543A)
FRONT JACK C.B.A. (VEP006541A)
VIDEO C.B.A. (VEP03586A)
Y/C PACK C.B.A. (VEP03587A)
Y/C NR PACK C.B.A. (VEP03615A)
METTER VOLUME C.B.A. (VEP00M61A)
NOMAL AUDIO ERASE HEAD
CH1
CH2
S-VIDEO INPUT C.B.A. (VEP00M60A)
J6701
R6702 75
R6701 75
S-VIDEO OUTPUT C.B.A. (VEP00M66A)
J6711
SYNC EDIT CONNECTION C.B.A. (VEP00M83A)
J6751 VJJ0169
AUDIO OSC C.B.A. (VEP00M67A)
SUB AUDIO(A) C.B.A. (VEP00M57A)
SUB AUDIO(B) C.B.A. (VEP00M58A)
ΔTIME CODE C.B.A. (VEP00K28A)
VIDEO HEAD
HEAD AMP C.B.A (VEP05138A)
HI-FI AUDIO HEAD
POWER SUPPLY C.B.A. (VEP01367A)
POWER JUNCTION C.B.A. (VEP01357A)
ΔAC CORD
AC PLUG CONNECTION C.B.A. (VEP01369A)
POWER SW EST15147V-AL
SUB POWER SUPPLY C.B.A. (VEP01368A)
CTL HEAD
G
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1
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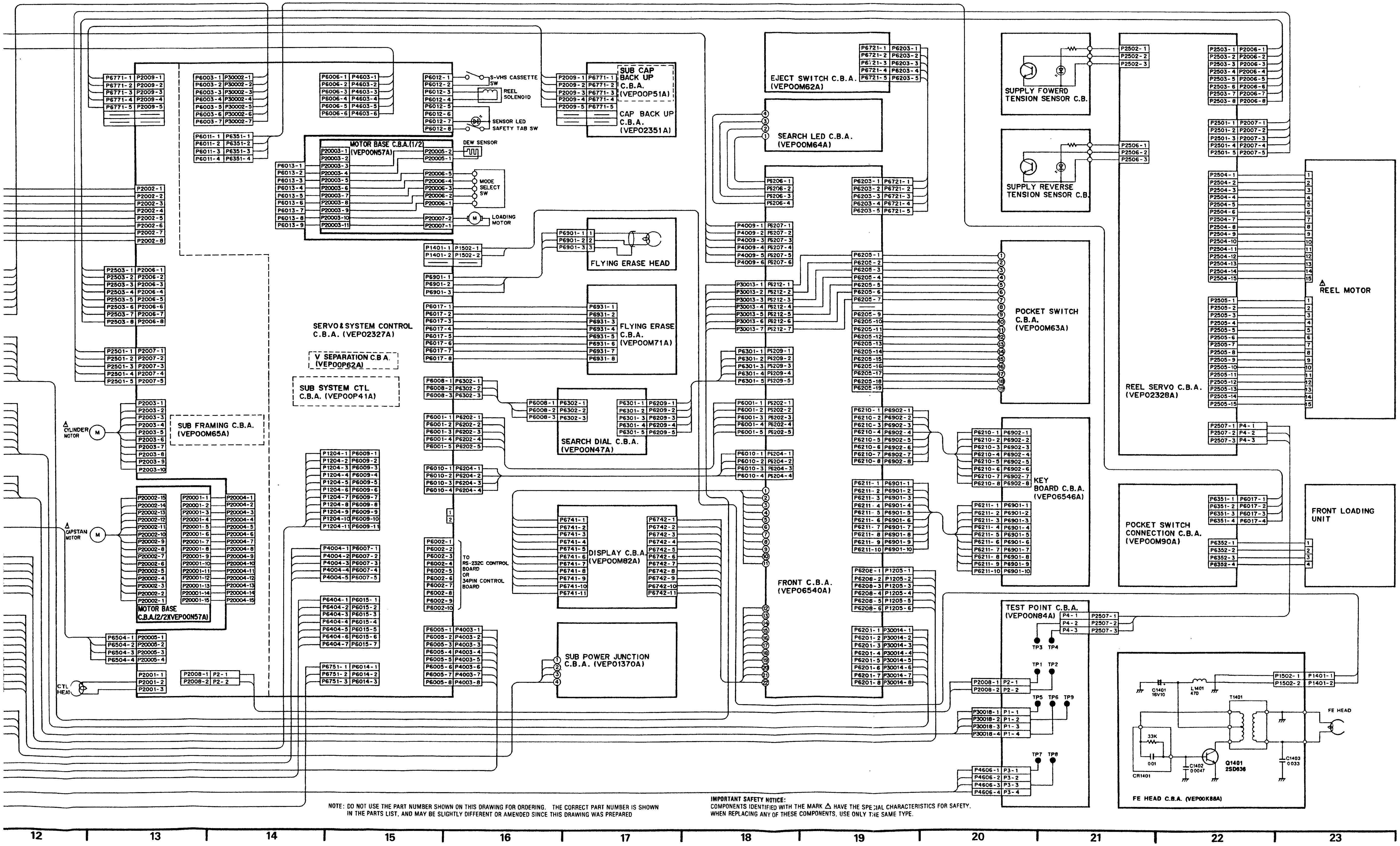
12


SERVO & SYSTEM CONTROL C.B.A. (VEPO2327A)
V SEPARATION C.B.A. (VEPOOP62A)
SUB SYSTEM CTL C.B.A. (VEPOOP41A)
SUB FRAMING C.B.A. (VEPOOM65A)
MOTOR BASE C.B.A.(1/2) (VEPOON57A)
MOTOR BASE C.B.A.(2/2)(VEPOON57A)
△ CYLINDER MOTOR
△ CAPSTAN MOTOR
CTL HEAD
S-VHS CASSETTE SW
REEL SOLENOID
SENSOR LED
SAFETY TAB SW
DEW SENSOR
MODE SELECT SW
LOADING MOTOR
SUB CAP BACK UP C.B.A. (VEPOOP51A)
CAP BACK UP C.B.A. (VEPO2351A)
FLYING ERASE HEAD
FLYING ERASE C.B.A. (VEPOOM71A)
SEARCH DIAL C.B.A. (VEPOON47A)
DISPLAY C.B.A. (VEPOOM82A)
TO RS-232C CONTROL BOARD OR 34PIN CONTROL BOARD
SUB POWER JUNCTION C.B.A. (VEPO1370A)
EJECT SWITCH C.B.A. (VEPOOM62A)
SEARCH LED C.B.A. (VEPOOM64A)
FRONT C.B.A. (VEPO6540A)
POCKET SWITCH C.B.A. (VEPOOM63A)
KEY BOARD C.B.A. (VEPO6546A)
TEST POINT C.B.A. (VEPOON84A)
TP1 TP2 TP3 TP4 TP5 TP6 TP7 TP8 TP9
SUPPLY FOWERD TENSION SENSOR C.B.
SUPPLY REVERSE TENSION SENSOR C.B.
REEL SERVO C.B.A. (VEPO2328A)
△ REEL MOTOR
POCKET SWITCH CONNECTION C.B.A. (VEPOOM90A)
FRONT LOADING UNIT
FE HEAD C.B.A. (VEPOOK88A)
FE HEAD
C1401 16V10
L1401 470
T1401
33K
.001
C1402 0.0047
Q1401 2SD636
C1403 .0033
CR1401
12
13
14
15
16
17
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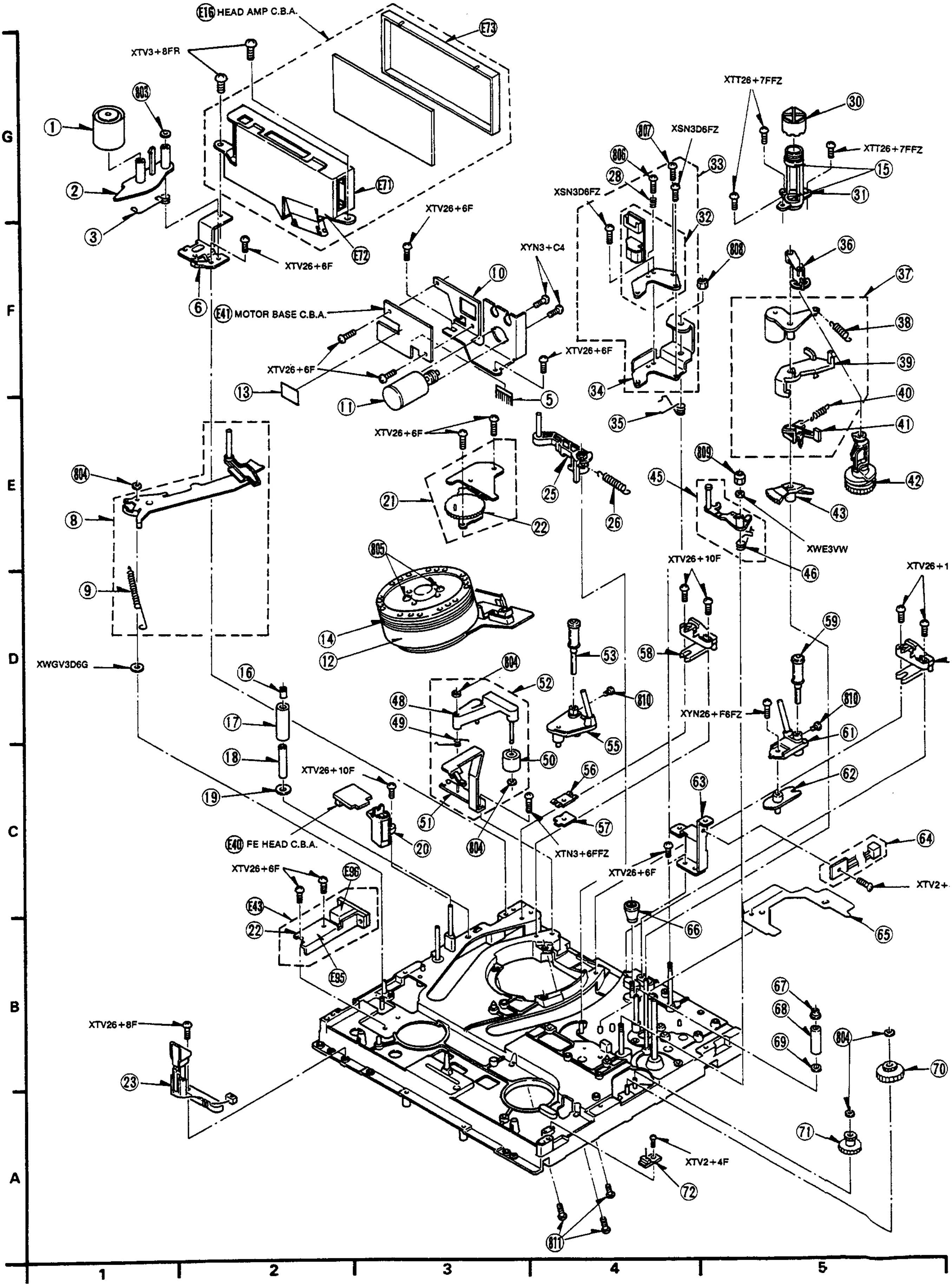
22
23

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK △ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

EXPLODED VIEWS ❶ *Chassis Parts Section*


E16 HEAD AMP C.B.A.
E73
XTV3+8FR
803
①
②
③
E71
E72
XTV26+6F
⑥
E41 MOTOR BASE C.B.A.
⑩
XTV26+6F
XYN3+C4
XTV26+6F
⑬
⑪
⑤
XTT26+7FFZ
30
XTT26+7FFZ
⑮
31
807
XSN3D6FZ
806
33
28
XSN3D6FZ
32
808
34
35
36
37
38
39
40
41
42
43
XWE3VW
804
⑧
⑨
XTV26+6F
21
22
25
26
45
809
46
XTV26+10F
XTV26+1
805
⑭
⑫
XWGV3D6G
⑯
⑰
⑱
⑲
804
52
48
49
50
51
804
53
810
55
56
57
XTN3+6FFZ
58
59
XYN26+F6FZ
810
61
62
63
64
XTV2+
XTV26+10F
⑳
E40 FE HEAD C.B.A.
XTV26+6F
E96
E43
22
E95
XTV26+6F
66
65
XTV26+8F
23
67
68
69
804
70
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XTV2+4F
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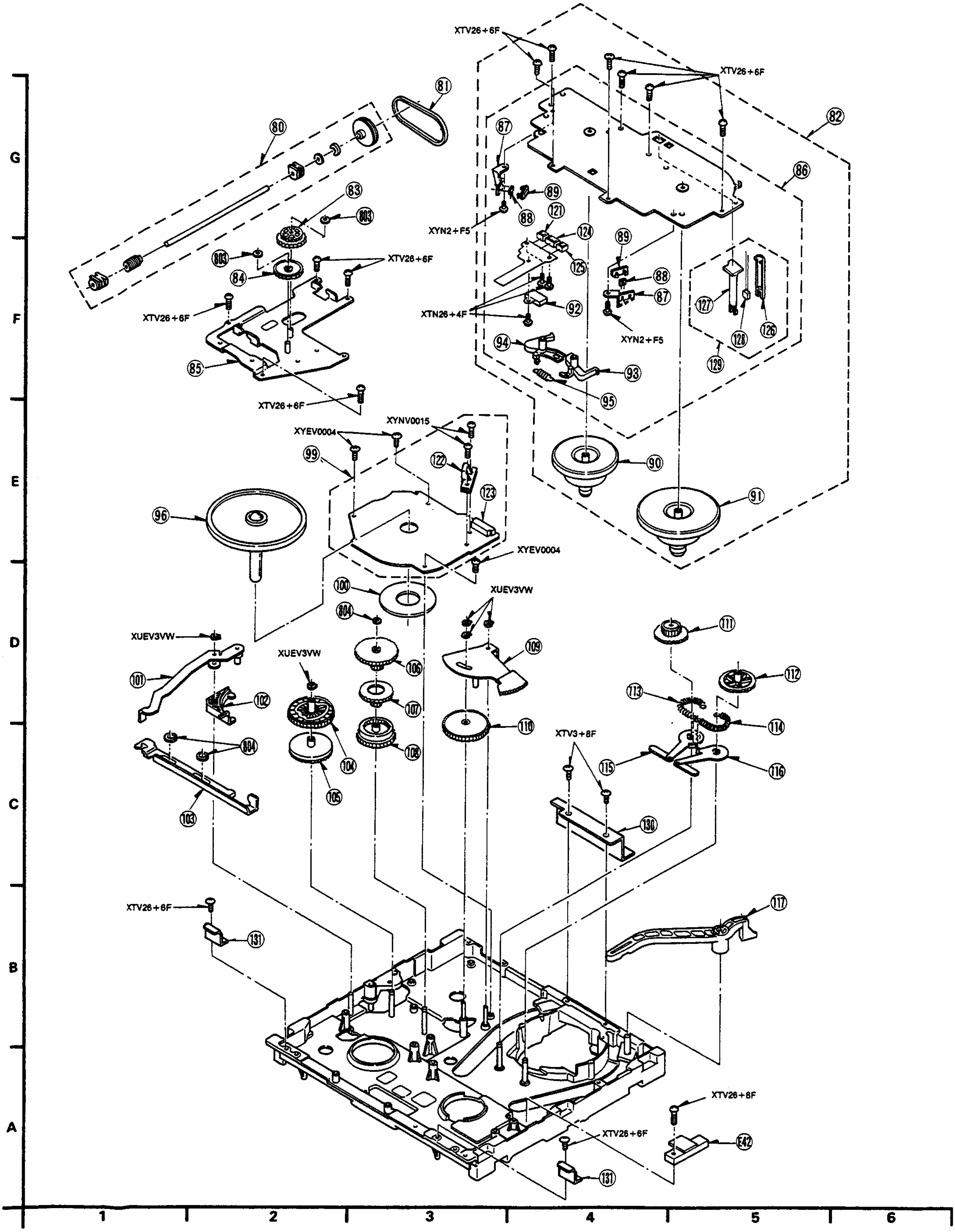
❷ Moving Mechanism Section


G
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XTV26+6F
81
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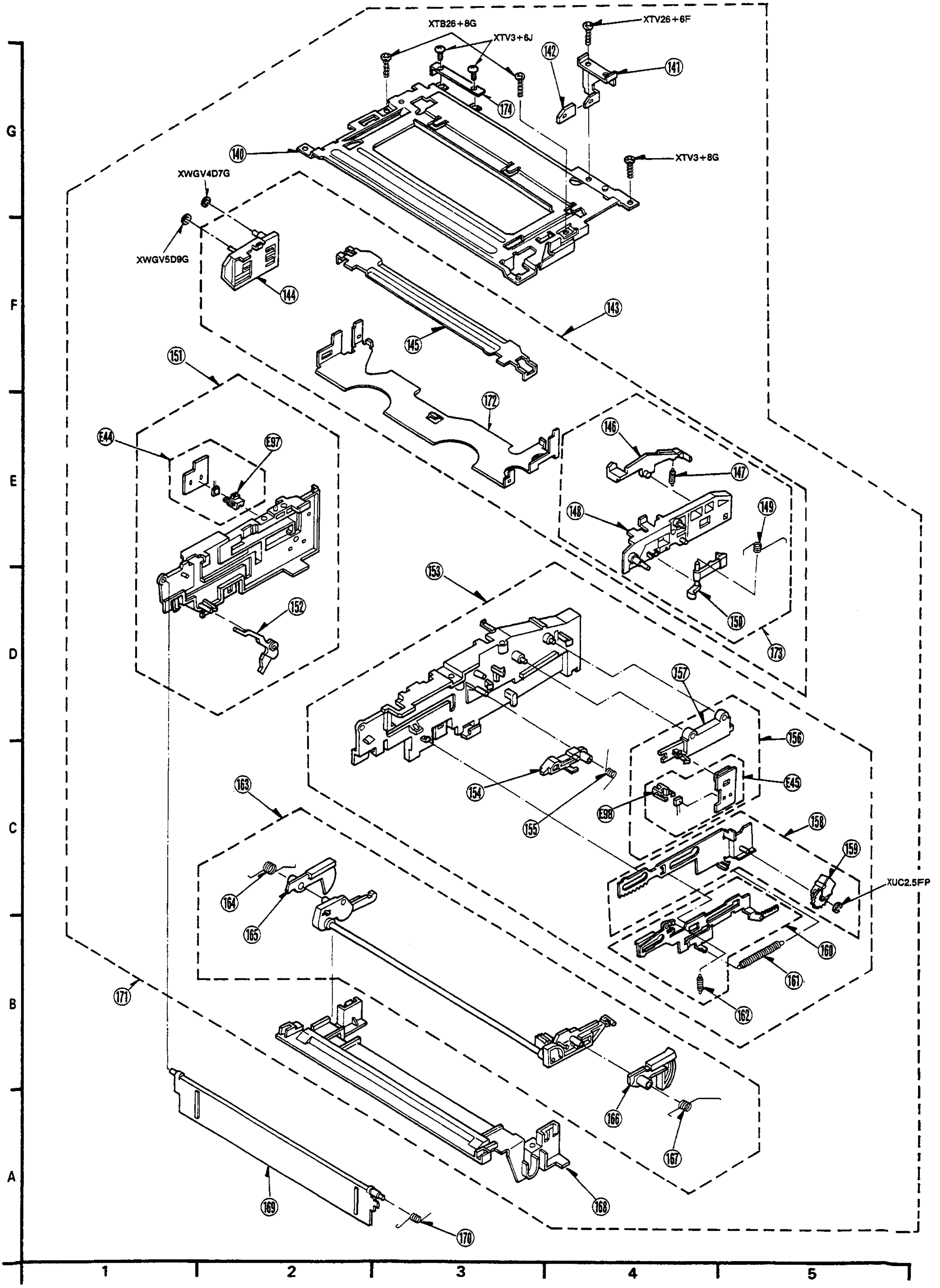
XTV26+6F
82
86
87
89
83
803
88
121
XYN2+F5
124
803
84
XTV26+6F
125
89
88
87
XTV26+6F
127
92
XTN26+4F
XYN2+F5
128
126
129
94
85
93
95
XTV26+6F
XYNV0015
XYEV0004
99
122
90
123
96
91
XYEV0004
100
XUEV3VW
804
111
XUEV3VW
109
XUEV3VW
101
106
112
113
102
107
114
110
XTV3+8F
804
104
108
115
116
105
103
130
XTV26+8F
117
131
XTV26+8F
XTV26+6F
E42
131

❸ Cassette Compertment Section


XTB26+8G
XTV3+6J
XTV26+6F
142
141
174
140
XTV3+8G
XWGV4D7G
XWGV5D9G
144
143
145
151
172
E44
E97
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E45
154
E98
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XUC2.5FP
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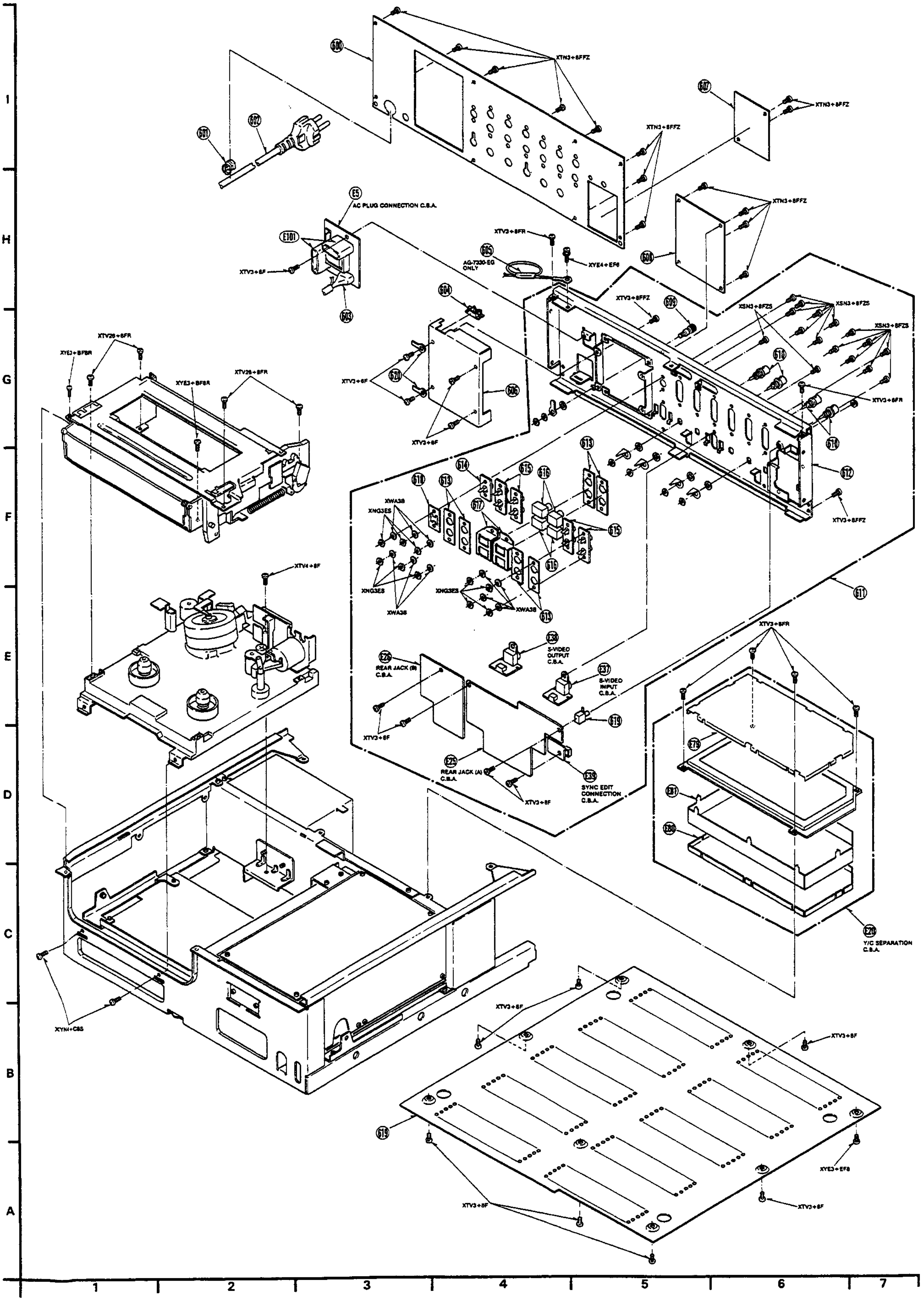
❹ Chassis Frame Section - (1)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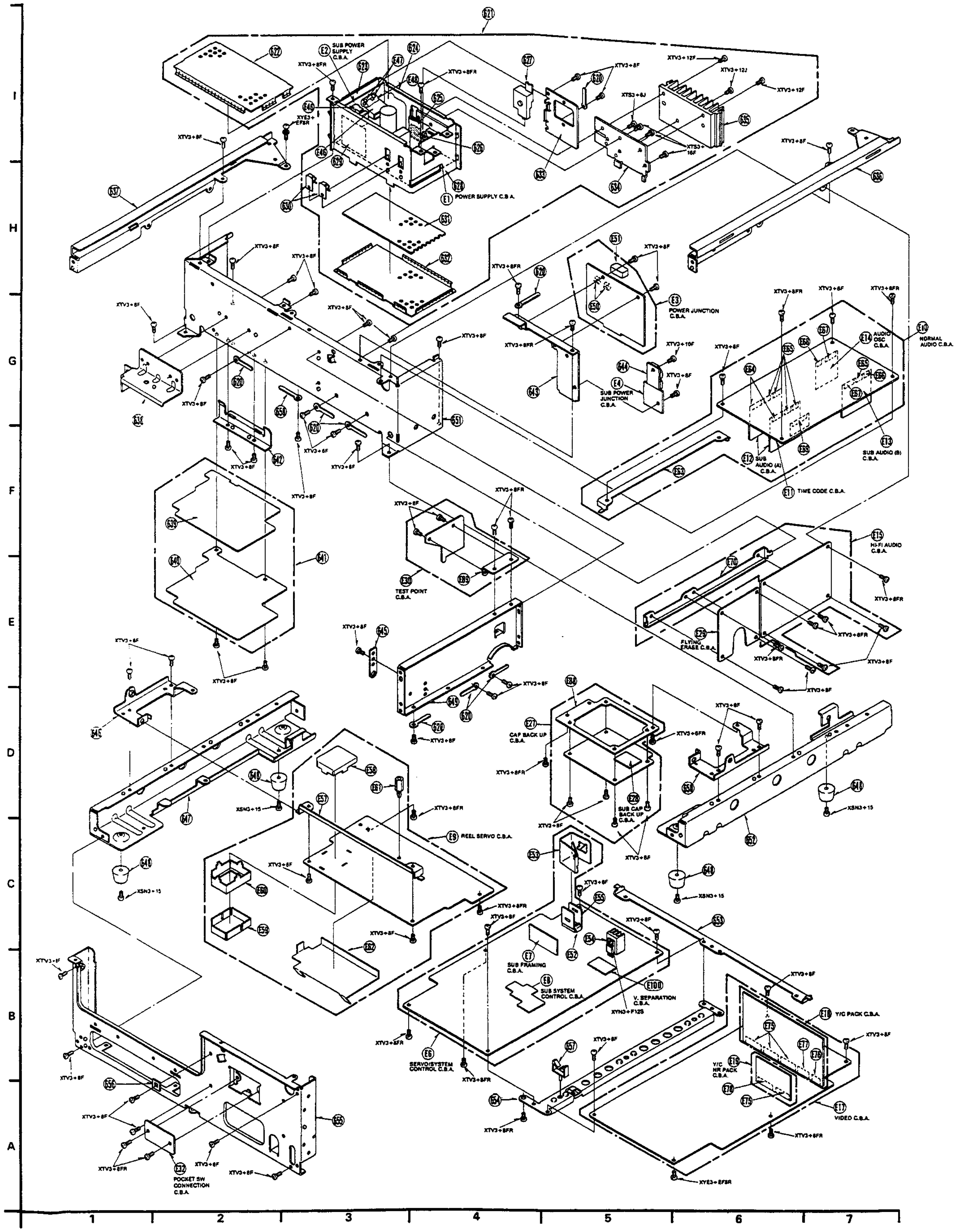
600
XTN3+8FFZ
601
602
607
XTN3+8FFZ
XTN3+8FFZ
E5
AC PLUG CONNECTION C.B.A.
XTN3+8FFZ
E101
XTV3+8F
603
XTV3+8FR
605
AG-7330-EG ONLY
XYE4+EF6
608
604
XTV3+8FFZ
609
XSN3+8FZS
XSN3+8FZS
XSN3+8FZS
XYE3+BF8R
XTV26+8FR
XYE3+BF8R
XTV26+8FR
618
XTV3+8F
620
606
XTV3+8FR
XTV3+8F
610
613
614
615
616
612
610
613
617
XWA38
XNG3ES
615
616
XTV3+8FFZ
XTV4+8F
XNG3ES
XWA38
XNG3ES
XWA38
613
611
E36
S-VIDEO OUTPUT C.B.A.
XTV3+8FR
E26
REAR JACK (B) C.B.A.
E37
S-VIDEO INPUT C.B.A.
619
XTV3+8F
E79
E25
REAR JACK (A) C.B.A.
E39
SYNC EDIT CONNECTION C.B.A.
XTV3+8F
E81
E80
E20
Y/C SEPARATION C.B.A.
XYN4+C8S
XTV3+8F
XTV3+8F
619
XYE3+EF8
XTV3+8F
XTV3+8F

❺ *Chassis Frame Section - (2)*



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657
E1 POWER SUPPLY C.B.A.
E2 SUB POWER SUPPLY C.B.A.
E3 POWER JUNCTION C.B.A.
E4 SUB POWER JUNCTION C.B.A.
E6 SERVO/SYSTEM CONTROL C.B.A.
E7 SUB FRAMING C.B.A.
E8 SUB SYSTEM CONTROL C.B.A.
E9 REEL SERVO C.B.A.
E10 NORMAL AUDIO C.B.A.
E11 TIME CODE C.B.A.
E12 SUB AUDIO (A) C.B.A.
E13 SUB AUDIO (B) C.B.A.
E14 AUDIO OSC C.B.A.
E15 HI-FI AUDIO C.B.A.
E17 VIDEO C.B.A.
E18 Y/C PACK C.B.A.
E19 Y/C NR PACK C.B.A.
E27 CAP BACK UP C.B.A.
E28 SUB CAP BACK UP C.B.A.
E29 FLYING ERASE C.B.A.
E30 TEST POINT C.B.A.
E32 POCKET SW CONNECTION C.B.A.
E100 V. SEPARATION C.B.A.
E46
E47
E48
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E66
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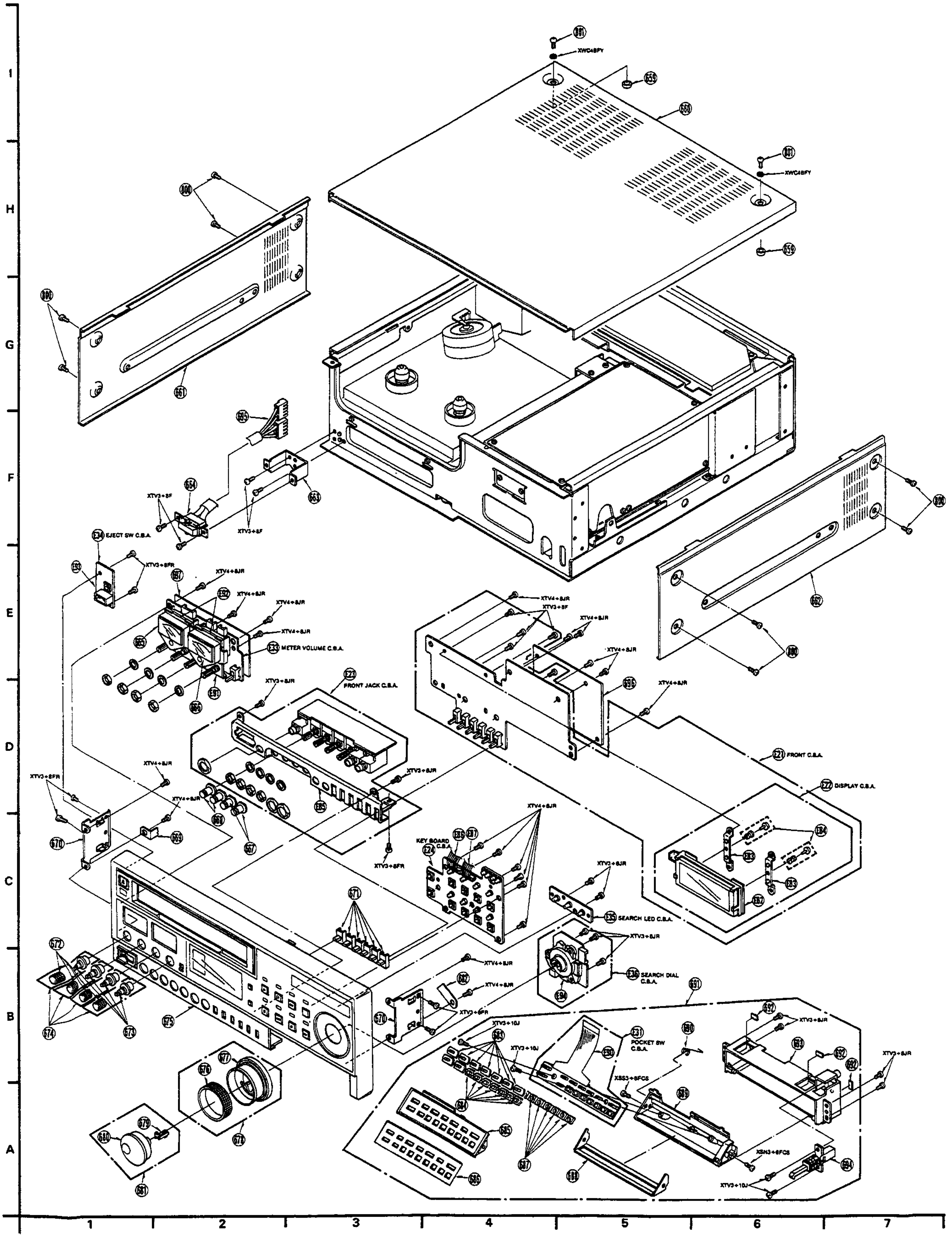
E69
E70
E75
E76
E77
E78
E88
E89
XTV3+8F
XTV3+8FR
XTV3+12F
XTV3+12J
XTV3+10F
XTS3+8J
XTS3+16F
XYE3+EF8R
XYE3+8F8R
XSN3+15
XYN3+F12S

❻ Casing Parts Section



801
XWC4BFY
659
660
801
XWC4BFY
659
800
800
661
695
664
XTV3+8F
663
XTV3+8F
E34 EJECT SW C.B.A.
E90
XTV3+8FR
697
XTV4+8JR
E97
XTV4+8JR
XTV4+8JR
XTV4+8JR
665
E33 METER VOLUME C.B.A.
666
E91
XTV3+8JR
E23 FRONT JACK C.B.A.
E85
XTV3+8JR
XTV3+8FR
XTV4+8JR
XTV3+8FR
XTV4+8JR
668
667
670
669
XTV4+8JR
XTV3+8F
XTV4+8JR
XTV4+8JR
696
XTV4+8JR
662
800
E21 FRONT C.B.A.
E22 DISPLAY C.B.A.
E84
E83
E83
E82
XTV4+8JR
KEY BOARD C.B.A.
E24
E86
E87
671
XTV3+8JR
E35 SEARCH LED C.B.A.
XTV3+8JR
E36 SEARCH DIAL C.B.A.
E94
XTV4+8JR
682
XTV4+8JR
XTV3+8FR
670
672
674
673
675
676
677
678
679
680
681
691
XTV3+10J
683
XTV3+10J
684
685
686
687
E30
E31 POCKET SW C.B.A.
690
XSS3+8FCS
689
688
692
XTV3+8JR
693
692
692
XTV3+8JR
XSN3+8FCS
XTV3+10J
694
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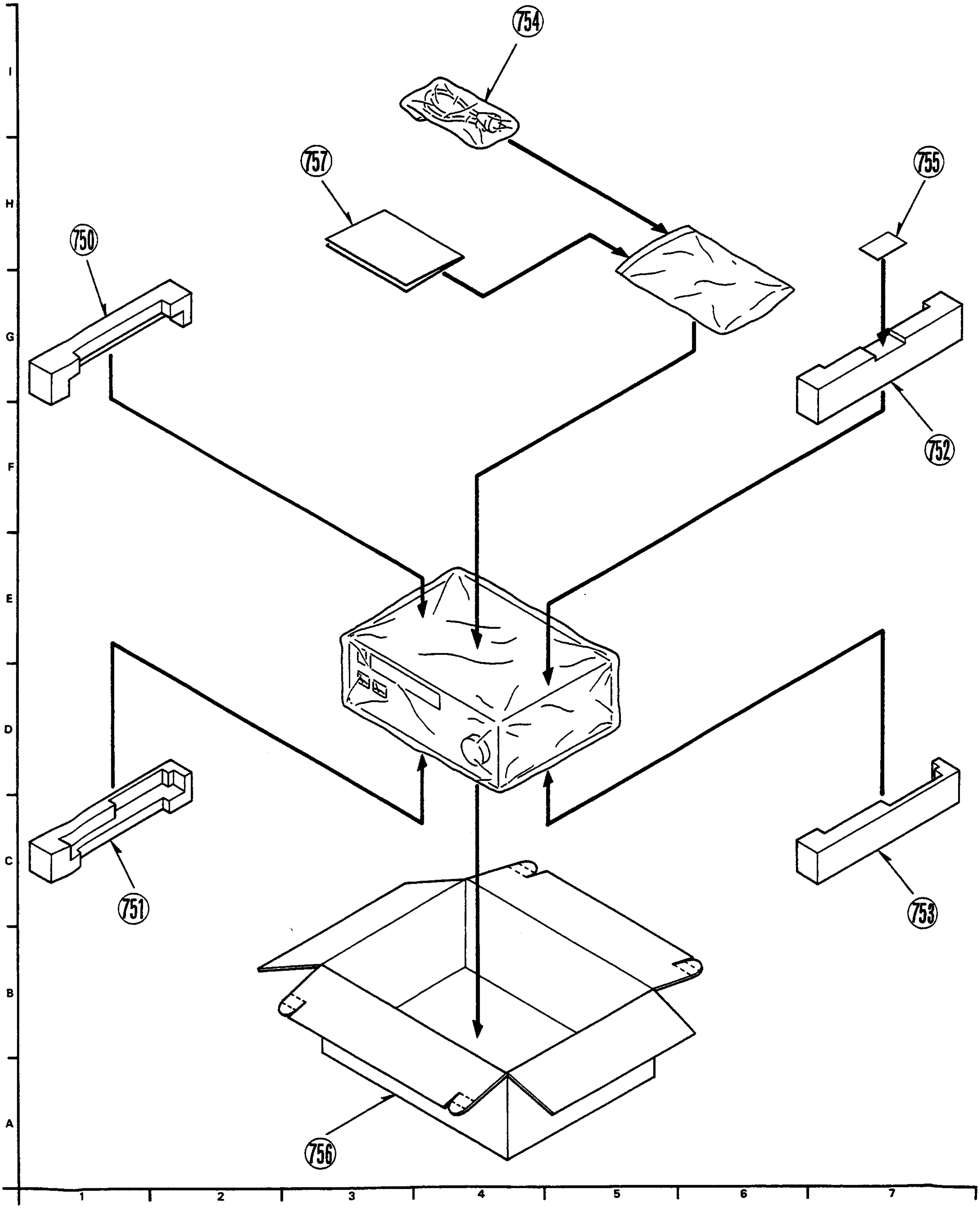
❼ Packing Parts Section


754
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REPLACEMENT PARTS LIST

Notes:

1. • Be sure to make your orders of replacement parts according to this list.
   • "〈R〉" in Remark column indicates recommended parts.
   • "〈M〉" in Remark column indicates needed in the periodical maintenance.
2. IMPORTANT SAFETY NOTICE
   Components identified by " ! " have special characteristics important for safety.
   When replacing any of these components, use only the original ones.
   Meaning of symbol ! on this parts list is exactly the same as symbol ⚠ on Schematic and Circuit Board Diagrams.
3. Unless otherwise specified;
   All resistors are in OHMS (Ω), K=1,000Ω, M=1,000KΩ.
4. ITEM NUMBERS WITH CAPITAL LETTER E
   Item numbers with capital letter E (Example: E1, E2,...) in Ref. No. column mean that the parts are listed with the E item numbers in the exploded views.
5. The main assembled parts are shown below C.B.A. marked with "■".
6. When ordering parts, use part No. only from Part No. column.
7. Printed circuit board assembly with mark (NLA) is no longer available after discontinuation of the product.

1. SERVICING FIXTURES & TOOLS LIST

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VFM8180HMDH	VHS ALIGNMENT TAPE	1	
		VFK0329	POST ADJ. SCREWDRIVER	1	
		VFK0132	BACK TENSION METER	1	(T2-H7-UM)
			(TENTELOMETER,		
			MADE IN U.S.A.)		
		VFK0191	POST ADJ. PLATE	1	
		VFK0133	DIAL TORQUE GAUGE	1	
		VFK0180	PLASTIC CLAMPER ONLY	1	
		VFK0134	ADAPTOR FOR VFK0133	1	
		VFK0190	REEL TABLE HEIGHT GAUGE	1	
		VFK0236	TENSION POST ADJ. PLATE	1	
		VFK0578	SENSOR ADJ. FIXTURE	1	
		VFK0328	H-POSITION ADJ. FIXTURE	1	
		VFK0330	FINE ADJ. SCREWDRIVER	1	
			(3mm PHI)		
		VFK0335	RETAINING RING REMOVER	1	
		VFK0326	HEX.WRENCH SET	1	
		VFK0343	CHECK LIGHT	1	
		MOR265	MOLYTONE GREASE	1	
		VFK27	HEAD CLEANING STICK	1	
		VFK0344	POST HEIGHT ADJ. FIXTURE	1	
		VFK0269	L TYPE SCREWDRIVER	1	
		VFK66	FAN TYPE TENSION GAUGE	1	

2. MECHANICAL REPLACEMENT PARTS LIST

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VXP1075	INPEDANCE ROLLER	1	
2(1)		VML2293	INPEDANCE ROLLER ARM	1	
3(1)		VMB1976	INPEDANCE SPRING	1	
5(1)		VWJ0365	FLEXIBLE WIRE	1	
6(1)		VMA7982	HEAD AMP ANGLE (L)	1	
8(1)		VXL1888	TENSION ARM UNIT	1	
9(1)		VMB1975	TENSION SPRING	1	
10(1)		VMA7986	MOTOR BASE	1	
11(1)		VEM0330	LOADING MOTOR UNIT	1	<R><M>
12(1)		VEG0716	LOWER CYLINDER UNIT	1	<R><M>
13(1)		VMZ0988	INSULATION SHEET	1	
14(1)		VEH0437	UPPER CYLINDER UNIT	1	<R><M>
15(1)		VMX1033	OIL SEAL	2	
16(1)		VMX1088	UPPER LIMITER	1	
17(1)		VDP1276	SUPPLY ROLLER	1	
18(1)		VMX1581	P1 COLLAR	1	
19(1)		VMX1533	LOWER LIMITER	1	
20(1)		VBS0038	FE HEAD	1	<R><M>
21(1)		VEK4171	MECH CONNECTION UNIT	1	
22(1)		VSS0257	MODE SW	1	
23(1)		VES0504	SAFETY SWITCH	1	<R>
25(1)		VXL1857	SUB LOADING ARM (1) UNIT	1	
26(1)		VMB1566	SUB POST SPRING	1	
28(1)		VMB1251	ADJUST SPRING	1	
30(1)		VXQ0006	THRUST SCREW UNIT	1	
31(1)		VXD0101	HOUSING UNIT	1	
32(1)		VED0107	A/C HEAD (1) UNIT	1	
33(1)		VED0104	A/C HEAD UNIT	1	
34(1)		VXA3649	A/C HEAD BASE UNIT	1	
35(1)		VMB1567	A/C HEIGHT SPRING	1	
36(1)		VMX1353	PINCH CAM CAP	1	
37(1)		VXL1902	PRESSURE ROLLER UNIT	1	<R><M>
38(1)		VMB1977	PINCH PRESSURE SPRING	1	
39(1)		VML1873	PINCH PRESSURE ARM	1	
40(1)		VMB1569	PINCH ARM SPRING	1	
41(1)		VML1874	PINCH LIFT ARM	1	
42(1)		VDG0577	PINCH CAM	1	
43(1)		VDG0357	P5 UNIT	1	
45(1)		VXL1485	P5 UNIT	1	
46(1)		VMB1554	P5 SPRING	1	
48(1)		VXL1744	HEAD CLEANING ARM UNIT	1	
49(1)		VMB1996	CLEANING SPRING	1	
50(1)		VXP0949	HEAD CLEANING PAD UNIT	1	
51(1)		VXS0089	EARTH PLATE UNIT	1	
52(1)		VXL1746	HEAD CLEANING UNIT	1	
53(1)		VXP1093	ROLLER POST (S) UNIT	1	
55(1)		VXA3249	INCLIND BASE (S) (2) UNIT	1	<R><M>
56(1)		VMA7029	HOLDER PLATE (S)	1	
57(1)		VMA7660	PLATE	1	
58(1)		VMD0910	POST STOPPER	2	
59(1)		VXP1094	ROLLER POST (T) UNIT	1	
61(1)		VXA3213	INCLIND BASE (T) (1) UNIT	1	<R><M>
62(1)		VXA2687	INCLIND ADJUSTMENT PLATE U	1	<R><M>
63(1)		VMA7983	HEAD AMP ANGLE (R)	1	
64(1)		VEK3185	DEW SENSOR UNIT	1	
65(1)		VXA3871	SHIELD PLATE UNIT	1	
66(1)		VHN0110	ADJUST NUT	1	
67(1)		VMX1544	P4 UPPER LIMITER	1	
68(1)		VMX1568	P4 SLEEV	1	
69(1)		VMX1534	P4 LOWER LIMITER	1	
70(1)		VDG0332	CONNECTION GEAR	1	
71(1)		VDG0483	PINCH SPEED DOWN GEAR	1	
72(1)		VSP0293	S-VHS SWITCH	1	<R>
80(2)		VXP1082	WORM SHAFT	1	<R><M>
81(2)		VDV0209	LOADING BELT	1	<R><M>
82(2)		VEM0326	REEL MOTOR UNIT	1	
83(2)		VDG0581	WORM WHEEL	1	<R><M>
84(2)		VDG0582	INTERMEDIATE GEAR	1	<R><M>
85(2)		VXA3646	GEAR BASE (1)UNIT	1	
86(2)		VXA3647	STATOR BASE UNIT	1	
87(2)		VMD0611	FG SUPPORT (1)	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
88(2)		HW-300B	HOLE IC	2	<R>
89(2)		VMD0621	FG SUPPORT (2)	2	
90(2)		VXR0187	TAKE UP REEL TABLE UNIT	1	<R><M>
91(2)		VXR0186	SUPPLY REEL TABLE UNIT	1	<R><M>
92(2)		VSJ0066	SOLENOID	1	
93(2)		VXZ0270	MAIN BRAKE (S) UNIT	1	<R><M>
94(2)		VXZ0271	MAIN BRAKE (T) UNIT	1	<R><M>
95(2)		VMB1978	BRAKE SPRING	1	
96(2)		VXP1088	ROTOR UNIT	1	<R><M>
99(2)		VEK4097	STATOR UNIT	1	
100(2)		VMA6847	SUB PLATE	1	
101(2)		VXL1895	CAM FOLLOWER ARM UNIT	1	
102(2)		VML1861	DETENT ARM	1	
103(2)		VMM0218	MAIN ROD	1	
104(2)		VDG0578	MAIN CAM GEAR	1	
105(2)		VDG0343	SUB CAM GEAR	1	
106(2)		VDG0580	CENTRE GEAR	1	<R><M>
107(2)		VXP0878	RETAINER GEAR	1	
108(2)		VDG0342	RING GEAR	1	
109(2)		VXA3144	SECTOR GEAR UNIT	1	
110(2)		VDG0579	LOADING CAM GEAR	1	<R><M>
111(2)		VDG0420	LOADING GEAR (T)	1	
112(2)		VDG0593	LOADING GEAR (S)	1	
113(2)		VMB1555	LOADING SPRING (T)	1	
114(2)		VMB1746	LOADING SPRING (S)	1	
115(2)		VXL1489	LOADING ARM (T) (1) UNIT	1	
116(2)		VXL1487	LOADING ARM (S) (1) UNIT	1	
117(2)		VML2304	CLEANING ROD	1	
121(2)		VJP1229R	CONNECTOR (2P)	1	
122(2)		VBK0048	MR HEAD	1	
123(2)		VJS2587	CONNECTOR (15P)	1	
124(2)		VJP1235T	CONNECTOR (8P)	1	
125(2)		VJP1229T	CONNECTOR (2P)	1	
126(2)		VMX0683	LED HOLDER (L)	1	
127(2)		VMX1565	LED HOLDER (A)	1	
128(2)		GL450	LED	1	<R>
129(2)		VEK4164	LED UNIT	1	
130(2)		VMA8003	MOUNT PLATE (B)	1	
131(2)		VMA7984	MOUNT PLATE	2	
140(3)		VMA7991	TOP PLATE	1	
141(3)		VMA7992	CASSETTE HOLDER ANGLE	1	
142(3)		VMD1384	CASSETTE HOLDER CAP	1	
143(3)		VXA3690	CASSETTE HOLDER UNIT	1	
144(3)		VMD1387	HOLDER GUIDE	1	
145(3)		VXA3691	HOLDER ANGLE UNIT	1	
146(3)		VML1882	DOOR OPEN LEVER	1	
147(3)		VMB1584	DOOR OPEN LEVER SPRING	1	
148(3)		VMD1386	HOLDER GUIDE (R)	1	
149(3)		VMB2063	RELEASE SPRING	1	
150(3)		VML2306	RELEASE LEVER	1	
151(3)		VXA3694	SIDE PLATE (L) UNIT	1	
152(3)		VML2305	OPENER LEVER	1	
153(3)		VXA3693	SIDE PLATE (R) UNIT	1	
154(3)		VML2288	DOWN SUPPORT LEVER	1	
155(3)		VMB1961	DOWN SUPPORT SPRING	1	
156(3)		VXA3498	SLIDE SW UNIT	1	
157(3)		VSS0258	SLIDE SW	1	<R>
158(3)		VXA3696	MAIN RACK UNIT	1	
159(3)		VDG0214	DAMPER	1	
160(3)		VXA3697	SUB RACK UNIT	1	
161(3)		VMB1997	CLUTCH SPRING	1	
162(3)		VMB1780	RACK C SPRING	1	
163(3)		VXP1089	MAIN SHAFT UNIT	1	
164(3)		VMB1999	SUB WIPER SPRING (L)	1	
165(3)		VML1878	SUB WIPER ARM (L)	1	
166(3)		VML1879	SUB WIPER ARM (R)	1	
167(3)		VMB1998	SUB WIPER SPRING (R)	1	
168(3)		VMA7988	CASSETTE GUIDE	1	
169(3)		VKF1423	BLINDER PANEL	1	
170(3)		VMB1258	BLINDER SPRING	1	
171(3)		VXA3698	CASSETTE COMPARTMENT UNIT	1	
172(3)		VMA7989	CASSETTE HOLDER	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
173(3)		VXA3692	HOLDER GUIDE (R) UNIT	1	
174(3)		VMA7999	CASSETTE PREVENT ANGLE	1	
600(4)		VGN1952	JACK NAME PLATE	1	
601(4)		VDB0293	BUSHING	1	<!><R>
602(4)		VJA0169	AC CORD	1	AG-7330-E/EG/EP<!><R>
602(4)		VJA0074	AC CORD	1	AG-7330-B<!><R>
602(4)		VJA0087	AC CORD	1	AG-7330-A<!><R>
603(4)		VMX0237	AC CORD COVER	1	
604(4)		VJF0546	EDGE SADDLE	1	
605(4)		VLP0098	CORE	1	AG-7330-EG ONLY<!><R>
606(4)		VMP2158	JACK COVER	1	
607(4)		VMP2087	RF CONVERTER COVER	1	
608(4)		VMP2376	RS-232C COVER	1	
609(4)		VJH0082	GND TERMINAL	1	
610(4)		VJS1440	BNC CONNECTOR	4	
611(4)		VEJ0820	JACK PANEL UNIT	1	
612(4)		VJH0531	JACK ANGLE	1	
613(4)		VMP1029	JACK PLATE (B)	6	
614(4)		VJJ0082	PIN JACK (A)	1	
615(4)		VJJ0081	PIN JACK (B)	4	
616(4)		VJJ0083	PIN JACK (C)	4	
617(4)		VMA5765	JACK SUPPORT ANGLE	2	
618(4)		VMP1028	JACK PLATE (A)	1	
619(4)		VJJ0041	CAMERA REMOTE CONNECTOR	1	
619(4)		VKM1738	BOTTOM COVER	1	<R>
620(4,5)		VJR3	CLAMPER (A)	10	
621(5)		VXK0938	POWER UNIT	1	
622(5)		VSC2754	SHIELD COVER (B)	1	
623(5)		VMZ1358	INSULATION SHEET (B)	1	
624(5)		VSC2756	SHIELD PLATE (A)	1	
625(5)		VWZ0074	IC COVER	1	
626(5)		VMZ1393	INSULATION SHEET (C)	1	
627(5)		VGQ1615	SUPPORTER	1	
628(5)		VSC2757	SHIELD PLATE (B)	1	
629(5)		VMZ1394	INSULATION SHEET (D)	1	
630(5)		VMC0357	TR SPRING	2	
631(5)		VMZ1357	INSULATION SHEET (A)	1	
632(5)		VSC2755	SHIELD COVER (A)	1	
633(5)		VMP1826	ANGLE	1	
634(5)		VSC2827	HEAT SINK (A)	1	
635(5)		VSC2778	HEAT SINK (B)	1	
636(5)		VMP2094	SIDE REINFORCEMENT FRAME (R)	1	
637(5)		VMP2095	SIDE REINFORCEMENT FRAME (L)	1	
638(5)		VMP2292	CHASSIS SUPPORT ANGLE	1	
639(5)		VSC2950	SHIELD PLATE (B)	1	
640(5)		VSC2949	SHIELD PLATE (A)	1	
641(5)		VXA3833	INSULATION SHEET UNIT	1	
642(5)		VMP2100	POWER SUPPORT ANGLE	1	
643(5)		VMP2099	C.BOARD ANGLE	1	
644(5)		STR90120	INTEGRATED CIRCUIT	1	<R>
645(5)		VMP2081	ROTATION ANGLE	1	
646(5)		VXA3685	PAIL SUPPORT ANGLE (L)	1	
647(5)		VMP2093	SIDE FRAME (L)	1	
648(5)		VMZ0172	CUSHION RUBBER	4	
649(5)		VMP2089	CENTRE FAME (S)	1	
650(5)		VXA3684	RAIL SUPPORT ANGLE (R) UNIT	1	
651(5)		VXA3682	CENTRE FRAME (L) UNIT	1	
652(5)		VMP2092	SIDE FRAME (R)	1	
653(5)		VMP2075	C.BOARD ANGLE (R)	1	
654(5)		VMP2101	C.BOARD ANGLE (C)	1	
655(5)		VXA3683	FRONT FRAME UNIT	1	
656(5)		VMZ1508	INSULATION BARRIER (C)	1	
657(5)		VJF0022	WIRE CLAMPER	1	
658(5)		VJF0127	CLAMPER (B)	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
659(6)		VMX0871	SPACER	2	
660(6)		VGM0497	TOP CASE	1	<R>
661(6)		VGM0499	SIDE PLATE (L)	1	<R>
662(6)		VGM0498	SIDE PLATE (R)	1	<R>
663(6)		VMP2070	POWER SWITCH ANGLE	1	
664(6)		VSW0031	POWER SWITCH	1	
665(6)		VSE0065	AUDIO METER	1	
666(6)		VSE0078	TRACKING METER	1	
667(6)		VGT0341	VR KNOB (B)	2	<R>
668(6)		VGU3121	VR KNOB (A)	2	<R>
669(6)		VMC0488	EARTH SPRING (B)	1	
670(6)		VMP2069	FRAME ANGLE	2	
671(6)		VGU3957	SLIDE KNOB	6	<R>
672(6)		VMG0477	VR KNOB RUBBER CAP	4	<R>
673(6)		VGU4606	VR KNOB	4	<R>
674(6)		VXU0895	VR KNOB UNIT	4	
675(6)		VYP2631	FRONT PANEL (1) UNIT	1	<R>
676(6)		VMG0476	SHTL RUBBER	1	<R>
677(6)		VGU4605	SHTL KNOB	1	<R>
678(6)		VXU0894	SHTL KNOB UNIT	1	
679(6)		VMC0444	JOG SPRING	1	<R>
680(6)		VGU4604	JOG KNOB	1	<R>
681(6)		VXU0932	JOG KNOB UNIT	1	
682(6)		VMC0487	EARTH SPRING (A)	1	
683(6)		VGU3465	SLIDE SW KNOB (B)	9	<R>
684(6)		VGU4608	PUSH SWITCH	7	
685(6)		VKF1231	SWITCH PANEL	1	
686(6)		VGH1953	SWITCH NAME PLATE	1	
687(6)		VMT0273	PUSH SWITCH CUSHION	7	
688(6)		VMP2065	REINFORCEMENT ANGLE	1	
689(6)		VKF1230	C.BOARD HOLDER	1	
690(6)		VMB1493	SWITCH BOX SPPING	1	
691(6)		VYF1356	SWITCH BOX UNIT	1	
692(6)		VMT0157	RUBBER CUSHION	3	
693(6)		VGQ1745	SWITCH BOX COVER	1	
694(6)		VGU2944	EJECTOR SW	1	
695(6)		VEK4421	POWER CONNECTOR UNIT	2	
750(7)		VPN2436	CUSHION (LEFT-TOP)	1	
751(7)		VPN2434	CUSHION (LEFT-BOTTOM)	1	
752(7)		VPN2435	CUSHION (RIGHT-TOP)	1	
753(7)		VPN2433	CUSHION (RIGHT-BOTTOM)	1	
754(7)		VJA0510	Y/C CABLE	1	<R>
755(7)		VMP2118	RF CONVERTER ATTACHMENT PLATE	1	
756(7)		VPG4720	PACKING CASE	1	<R>AG-7330-E
756(7)		VPG4721	PACKING CASE	1	<R>G-7330-A
756(7)		VPG4722	PACKING CASE	1	<R>AG-7330-B
756(7)		VPG4724	PACKING CASE	1	<R>AG-7330-EG
756(7)		VPG4725	PACKING CASE	1	<R>AG-7330-EP
757(7)		VQT3171	OPERATING INSTRUCTIONS	1	<R>AG-7330-E/EG (D/F)
757(7)		VQT3172	OPERATING INSTRUCTIONS	1	<R>AG-7330-A/B/E (E)
757(7)		VQT3173	OPERATING INSTRUCTIONS	1	<R>AG-7330-EP (I/S)
800(6)		VHD0426	SCREW	8	
801(6)		VHD0222	SCREW	2	
803(1,2)		VMX0653	CUT WASHER	3	
804(1,2)		VMX1079	CUT WASHER	8	
805(1)		VHD0425	SCREW	2	
806(1)		VHD0322	ADJUST SCREW	1	
807(1)		VHD0089B	AZIMUTH SCREW	1	
808(1)		VHN0063	M4 NYLON NUT	1	
809(1)		VHN0023	M3 NYLON NUT	1	
810(1)		VHD0133	SCREW	2	
811(1)		VHD0342	SCREW	3	

3. ELECTRICAL REPLACEMENT PARTS LIST

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
E1		VEP01367A	POWER SUPPLY C.B.A.	1	(NLA)<R>
E2		VEP01368A	SUB POWER SUPPLY C.B.A.	1	(NLA)<R>
E3		VEP01357A	POWER JUNCTION C.B.A.	1	(NLA)<R>
E4		VEP01370A	SUB POWER JUNCTION C.B.A.	1	(NLA)<R>
E5		VEP01369A	AC PLUG CONNECTION C.B.A.	1	(NLA)<R>
E6		VEP02327A	SERVO/SYSTEM CTL C.B.A.	1	(NLA)<R> INCLUDING THE SUB FRAMING C.B.A (VEP00M65A), SUB SYSTEM CTL C.B.A. (VEP00P41A) V SEPARATION C.B.A. (VEP00P62A)
E7		VEP00M65A	SUB FRAMING C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDED IN SERVO/ SYSTEM CTL C.B.A. (VEP02327A)
E8		VEP00P41A	SUB SYSTEM CTL C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDED IN SERVO/ SYSTEM CTL C.B.A. (VEP02327A)
E99		VEP00P62A	V SEPARATION C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDED IN SERVO/ SYSTEM CTL C.B.A. (VEP02327A)
E9		VEP02328A	REEL SERVO C.B.A.	1	(NLA)<R>
E10		VEP04249A	NORMAL AUDIO C.B.A.	1	(NLA)<R> INCLUDING THE TIME CODE C.B.A. (VEP00K28A) SUB AUDIO (A) C.B.A. (VEP00M57A) SUB AUDIO (B) C.B.A. (VEP00M58A) AUDIO OSC C.B.A. (VEP00M67A)
E11		VEP00K28A	TIME CODE C.B.A.	1	(NLA)<R><!> PARTS LIST IS INCLUDED IN THE NORMAL AUDIO C.B.A. (VEP04249A)
E12		VEP00M57A	SUB AUDIO (A) C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDD IN THE NORMAL AUDIO C.B.A. (VEP04249A)
E13		VEP00M58A	SUB AUDIO (B) C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDED IN THE NORMAL AUDIO C.B.A. (VEP04249A)
E14		VEP00M67A	AUDIO OSC C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDED IN THE NORMAL AUDIO C.B.A. (VEP04249A)
E15		VEP04250A	HI-FI AUDIO C.B.A.	1	(NLA)<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
E16		VEP05138A	HEAD AMP C.B.A.	1	(NLA)<R>
E17		VEP03586A	VIDEO C.B.A.	1	(NLA)<R> INCLUDING THE Y/C PACK C.B.A. (VEP03587A) Y/C NR PACK C.B.A. (VEP03615A)
E18		VEP03587A	Y/C PACK C.B.A.	1	(NAL)<R> PARTS LIST IS INCLUDED IN THE VIDEO C.B.A. (VEP03586A)
E19		VEP03615A	Y/C NR PACK C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDED IN THE VIDEO C.B.A. (VEP03586A)
E20		VEP03622A	Y/C SEPARATION C.B.A.	1	(NLA)<R>
E21		VEP06540A	FRONT C.B.A.	1	(NLA)<R> INCLUDING THE DISPLAY C.B.A. (VEP00M82A)
E22		VEP00M82A	DISPLAY C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDED IN THE FRONT C.B.A. (VEP06540A)
E23		VEP06541A	FRONT JACK C.B.A.	1	(NLA)<R>
E24		VEP06546A	KEY BOARD C.B.A.	1	(NLA)<R>
E25		VEP06542A	REAR JACK (A) C.B.A.	1	(NLA)<R>
E26		VEP06543A	REAR JACK (B) C.B.A.	1	(NLA)<R>
E27		VEP02351A	CAP BACK UP C.B.A.	1	(NLA)<R> INCLUDING THE SUB CAP BACK UP C.B.A. (VEP00P51A)
E28		VEP00P51A	SUB CAP BACK UP C.B.A.	1	(NLA)<R> PARTS LIST IS INCLUDED IN THE CAP BACK UP C.B.A. (VEP02351A)
E29		VEP00N71A	FLYING ERASE C.B.A.	1	(NLA)<R>
E30		VEP00N84A	TEST POINT C.B.A.	1	(NLA)<R>
E31		VEP00M63A	POCKET SW C.B.A.	1	(NLA)<R>
E32		VEP00M90A	POCKET SW CONNECTION C.B.A.	1	(NLA)<R>
E33		VEP00M61A	METER VOLUME C.B.A.	1	(NLA)<R>
E34		VEP00M62A	EJECT SW C.B.A.	1	(NLA)<R>
E35		VEP00M64A	SEARCH LED C.B.A.	1	(NLA)<R>
E36		VEP00N47A	SEARCH DIAL C.B.A.	1	(NLA)<R>
E37		VEP00M60A	S-VIDEO INPUT C.B.A.	1	(NLA)<R>
E38		VEP00M66A	S-VIDEO OUTPUT C.B.A.	1	(NLA)<R>
E39		VEP00M83A	SYNC EDIT CONNECTION C.B.A.	1	(NLA)<R>
E40		VEP00K88A	FE HEAD C.B.A.	1	(NLA)<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
E41		VEP00N57A	MOTOR BASE C.B.A.	1	(NLA)<R>
E42		VEK2657	TENSION SENSOR UNIT	1	(NLA)<R>
E43		VEK4265	REV TENSION SENSOR UNIT	1	(NLA)<R>
E44		VEK3578	PHOTO TR. (L) UNIT	1	(NLA)<R>
E45		VEK4058	PHOTO TR. (R) UNIT	1	(NLA)<R>
	■	VEP01367A	POWER SUPPLY C.B.A.		
C1007		ECOS2GG121H	E.CAPACITOR 400V 120U	1	
C1008		VCK0042	C.CAPACITOR 470P	1	
C1009		ECEA2GG4R7X	E.CAPACITOR 400V 4.7U	1	
C1010		ECQE6473MZ	P.CAPACITOR 630V 0.047U	1	
C1011		ECKD3D331KBN	C.CAPACITOR 330P	1	
C1012		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C1013		ECQB1H472JH	P.CAPACITOR 50V 4700P	1	
C1014		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C1015		ECEA1CGE470	E.CAPACITOR 16V 47U	1	
C1016,17		ECEA1VGE331	E.CAPACITOR 35V 330U	2	
C1018,19		ECEA1DPS122X	E.CAPACITOR 20V 1200U	2	
C1020		ECEA1AFZ681X	E.CAPACITOR 10V 680U	1	
C1021		ECEA1HGE331	E.CAPACITOR 50V 330U	1	
C1022		ECEA2AGE010	E.CAPACITOR 100V 1U	1	
C1023		ECEA1HGE100	E.CAPACITOR 50V 10U	1	
C1024		ECEA1AFZ331X	E.CAPACITOR 10V 330U	1	
C1025-27		ECQB1H103JH	P.CAPACITOR 50V 0.01U	3	
C1028		ECEA1HFS100	E.CAPACITOR 50V 10U	1	
C1029		ECEA1HGE100	E.CAPACITOR 50V 10U	1	
C1030,31		ECEA1AGE101	E.CAPACITOR 10V 100U	2	
C1032		ECEA1CGE470	E.CAPACITOR 16V 47U	1	
C1034		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C1035,36		ECCF1H101JC	C.CAPACITOR 50V 100P	2	
C1038		ECEA1AFZ331X	E.CAPACITOR 10V 330U	1	
C1045		VCK0042	C.CAPACITOR 470P	1	
C1046		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
D1002-05		RM2B	DIODE	4	<R>
D1006		VSD0002	DIODE	1	<R>
D1007		AP01C	DIODE	1	<R>
D1009		MA178	DIODE	1	<R>
D1010,11		FMLG12SP	DIODE	2	<R>
D1012		MA2200B	DIODE	1	<R>
D1013		FMB29	DIODE	1	<R>
D1014		MA185	DIODE	1	<R>
D1015,16		VSD0001	DIODE	2	<R>
D1017		AK04	DIODE	1	<R>
D1018,19		MA178	DIODE	2	<R>
D1020		MA4030L	DIODE	1	<R>
D1021		MA165	DIODE	1	<R>
D1022		MA178	DIODE	1	<R>
IC1001		STRD6009E	IC	1	<R>
IC1002		SE013E	IC	1	<R>
IC1003		STK5382	IC	1	<R>
L1002,03		VLQ0354	COIL 22UH	2	
L1004		ELC07D220C	COIL	1	
L1005		VLQ0354	COIL 22UH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
P1002		VJP1930T	CONNECTOR(MALE) 15P	1	
P1003		VJP1243T	CONNECTOR(MALE) 3P	1	
Q1001		PC111A	PHOTO COUPLER	1	<R>
Q1002		2SD638	TRANSISTOR	1	(R,S)<R>
R1002,03		ERDS2TJ123	C.RESISTOR 1/4W 12K	2	
R1004,05		ERDS2TJ474	C.RESISTOR 1/4W 470K	2	
R1006		ERG2ANJ683U	M.RESISTOR 2W 68K	1	
R1007		ERG2SJ820U	M.RESISTOR 2W 82	1	
R1009		EROS2CKG2000	M.RESISTOR 1/4W 200	1	
R1010		ERD2FCG102P	C.RESISTOR 1/4W 1K	1	
R1011		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R1012		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R1013		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R1014		ERG12ANJ182	M.RESISTOR 1/2W 1800	1	
R1016		ERQ12HJ4R7	F.RESISTOR 1/2W 4.7	1	
R1017		ERD25FAJ100	C.RESISTOR 1/4W 10	1	
R1018,19		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R1020		ERG2SJ220U	M.RESISTOR 2W 22	1	
R1021		ERF5AK2R2	W.RESISTOR 5W 2.2	1	
R1023		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
T1001		VTP0283	TRANSFORMER	1	
	■	VEP01368A	SUB POWER SUPPLY C.B.A.		
C1001		VCK0045	C.CAPACITOR 250V 1500P	1	<!><R>
C1002		ECQU2A224MN	P.CAPACITOR 250V 0.22U	1	<!><R>
C1003-05		VCK0045	C.CAPACITOR 250V 1500P	3	<!><R>
C1006		ECQU2A224MN	P.CAPACITOR 250V 0.22U	1	
D1001		SNR-300K4	SURGE ABSORBER	1	<R>
F1001		XBA2C25TB0	FUSE 250V 25A	1	<!><R>
L1001		ELF18D606F	LINE FILTER	1	
P1001		VJP2639	CONNECTOR(MALE) 4P	1	
			MISCELLANEOUS		
E46		VMZ1305	CAPACITOR COVER	2	
E47		VJF0318	FUSE HOLDER	2	
E48		VMZ0429	FUSE COVER	1	
E49		VMZ0965	CAPACITOR COVER	4	
	■	VEP01357A	POWER JUNCTION C.B.A.		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C1201		ECQV1H334JZ	P.CAPACITOR 50V 0.33U	1	
C1202		ECEA1CGE101	E.CAPACITOR 16V 100U	1	
C1203		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C1204		ECEA1HGE4R7	E.CAPACITOR 50V 4.7U	1	
C1205		ECEA0JGE470	E.CAPACITOR 6.3V 47U	1	
C1206		ECEA1EGE470	E.CAPACITOR 25V 47U	1	
C1207,08		ECEA1AGE101	E.CAPACITOR 10V 100U	2	
C1209		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C1210		ECEA1AGE101	E.CAPACITOR 10V 100U	1	
C1213		ECEA1CGE102	E.CAPACITOR 16V 1000U	1	
D1201-06		MA165	DIODE	6	<R>
D1207		MA4130M	DIODE	1	<R>
D1208-10		MA165	DIODE	3	<R>
D1211,12		MA4082H	DIODE	2	<R>
D1213		MA165	DIODE	1	<R>
D1214		FMB-G14L	DIODE	1	<R>
F1201		XBA2C08TB0	FUSE 250V 0.8A	1	<!><R>
IC1202,03		SI3050C	IC	2	<R>
P1201		VJP1932T	CONNECTOR(MALE) 15P	1	
P1202		VJP1232T	CONNECTOR(MALE) 5P	1	
P1203		VJP1230T	CONNECTOR(MALE) 3P	1	
P1204		VJP1238T	CONNECTOR(MALE) 11P	1	
P1205		VJP1233T	CONNECTOR(MALE) 6P	1	
P1206		VJP1232T	CONNECTOR(MALE) 5P	1	
P1207		VJP1230T	CONNECTOR(MALE) 3P	1	
P1208		VJP1231T	CONNECTOR(MALE) 4P	1	
Q1201		2SD636	TRANSISTOR	1	(Q,R)<R>
Q1202		2SD1273	TRANSISTOR	1	(P,Q)<R>
Q1203,04		2SD636	TRANSISTOR	2	(Q,R)<R>
Q1205		2SD639	TRANSISTOR	1	(Q,R)<R>
QR1201		UN1211	TRANSISTOR-RESISTOR	1	<R>
QR1202		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR1203		UN1211	TRANSISTOR-RESISTOR	1	<R>
R1202		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R1203		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R1204		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R1205,06		ERDS2TJ333	C.RESISTOR 1/4W 33K	2	
R1207		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R1208		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R1209		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R1210,11		ERDS2TJ331	C.RESISTOR 1/4W 330	2	
R1212		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R1213-15		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R1216		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R1217		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
			MISCELLANEOUS		
E50		VJF0318	FUSE HOLDE	2	<!><R>
E51		VMZ0429	FUSE COVER	1	<!><R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP01370A	SUB POWER JUNCTION C.B.A.		
C1211,12		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
	■	VEP01369A	AC PLUG CONNECTION C.B.A.		
C1105		ECQU2A224MN	P.CAPACITOR 250V 0.22U	1	
L1101		ELF18D624F	COIL	1	
P1101		VJP2638	CONNECTOR(MALE) 4P	1	
R1101		ERC12GM334	S.RESISTOR 1/2W 330K	1	
			MISCELLANEOUS		
E101		VMZ1305	CAPACITOR COVER	2	
	■	VEP02327A	SERVO/SYSTEM CTL C.B.A.		INCLUDING THE SUB FRAMING C.B.A. (VEP00M65A), SUB SYSTEM CTL C.B.A. (VEP00041A) V SEPARATION C.B.A. (VEP00P62A)
BATT1		VSB0004	BATTERY	1	
C1		ECQB1H152JH	P.CAPACITOR 50V 1500P	1	ON VEP00P62A
C1,2		ECEA1CKS100	E.CAPACITOR 16V 10U	2	
C2		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	ON VEP00P62A
C3		ECEA1CKS220	E.CAPACITOR 16V 20U	1	
C4		ECQB1H332JH	P.CAPACITOR 50V 3300P	1	
C1401		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C2001		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C2002		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2003		ECQV1H683JZ	P.CAPACITOR 50V 0.068U	1	
C2004		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2005		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2006		ECEA1AK470U	E.CAPACITOR 10V 47U	1	
C2007		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2008		ECQB1H332JH	P.CAPACITOR 50V 3300P	1	
C2009		ECQB1H472JH	P.CAPACITOR 50V 4700P	1	
C2010		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C2011-14		ECEA1HKN010	E.CAPACITOR 50V 1U	4	
C2015,16		ECEA1CKS100	E.CAPACITOR 16V 10U	2	
C2017		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C2018		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C2019		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C2020		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C2022		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2023		ECQB1H122JH	P.CAPACITOR 50V 1200P	1	
C2028		ECQB1H333JH	P.CAPACITOR 50V 0.033U	1	
C2030		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C2031		ECCF1H150JC	C.CAPACITOR 50V 15P	1	
C2032		ECCF1H181JC	C.CAPACITOR 50V 180P	1	
C2033		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C2034,35		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C2036		ECQB1H222JH	P.CAPACITOR 50V 2200P	1	
C2037		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C2038		ECQV1H563JZ	P.CAPACITOR 50V 0.056U	1	
C2039		ECEA1HKS010	E.CAPACITOR 50V 1U	1	
C2040,41		ECEA0JK330	E.CAPACITOR 6.3V 33U	2	
C2042		ECEA10Z47	E.CAPACITOR 10V 47U	1	
C2043,44		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	2	
C2045,46		ECQB1H472JH	P.CAPACITOR 50V 4700P	2	
C2047		ECQB1H223JH	P.CAPACITOR 50V 0.022U	1	
C2048		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C2049		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C2050		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C2051		ECQB1H333JH	P.CAPACITOR 50V 0.033U	1	
C2052		ECQB1H223JH	P.CAPACITOR 50V 0.022U	1	
C2053		ECQB1H333JH	P.CAPACITOR 50V 0.033U	1	
C2054		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C2055		ECEA1CKS220	E.CAPACITOR 16V 22U	1	
C2056		ECKF1H471KB	C.CAPACITOR 50V 470P	1	
C2057		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C2058		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C2059		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C2060		ECEA1EU101	E.CAPACITOR 25V 100U	1	
C2061		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2062-64		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	3	
C2065		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2066-68		ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	3	
C2069		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C2070		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C2071		ECEA1EU101	E.CAPACITOR 25V 100U	1	
C2072		ECQB1H333JH	P.CAPACITOR 50V 0.033U	1	
C2073		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2074-76		ECEA1HKS2R2	E.CAPACITOR 50V 2.2U	3	
C2077-79		ECQB1H332JH	P.CAPACITOR 50V 3300P	3	
C2080-82		ECQB1H333JH	P.CAPACITOR 50V 0.033U	3	
C2083		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C2084		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2085,86		ECEA1EU101	E.CAPACITOR 25V 100U	2	
C2088		ECEA1AU102	E.CAPACITOR 10V 1000U	1	
C2091		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C2092		ECEA1AK220	E.CAPACITOR 10V 22U	1	
C2093		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C2094-99		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	6	
C2100-06		ECKF1H271KB	C.CAPACITOR 50V 270P	7	
C2107		ECEA1HKS010	E.CAPACITOR 50V 1U	1	
C2108,09		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
C2110		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C2111		ECEA1HKS010	E.CAPACITOR 50V 1U	1	
C2201		ECEA1AK470U	E.CAPACITOR 10V 47U	1	
C2202		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2203		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C2204		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2205		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C2206,07		ECEA1CKS100	E.CAPACITOR 16V 10U	2	
C2208		ECKF1H102ZF	C.CAPACITOR 50V 1000P	1	
C2209		ECEA1HKS010	E.CAPACITOR 50V 1U	1	
C2210		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C2215		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2301		ECEA1AK470U	E.CAPACITOR 10V 47U	1	
C2302		ECKF1H102ZF	C.CAPACITOR 50V 1000P	1	
C2303,04		ECCF1H220JC	C.CAPACITOR 50V 22P	2	
C2305		ECCF1H100DC	C.CAPACITOR 50V 10P	1	
C6001		ECEA1HKS010	E.CAPACITOR 50V 1U	1	
C6002		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6003		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C6004-06		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	3	
C6007		ECKF1H151KB	C.CAPACITOR 50V 150P	1	
C6008		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6009		ECEA1CSS102U	E.CAPACITOR 16V 1000U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C6010		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6011		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C6012		ECEA1CSS102U	E.CAPACITOR 16V 1000U	1	
C6013		ECEA1EK330	E.CAPACITOR 25V 33U	1	
C6014		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C6015		ECEA1EK470	E.CAPACITOR 25V 47U	1	
C6016,17		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
C6018,19		ECCF1H330JC	C.CAPACITOR 50V 33P	2	
C6020		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C6021		ECKF1H102ZF	C.CAPACITOR 50V 1000P	1	
C6022		ECEA1HKS010	E.CAPACITOR 50V 1U	1	
C6023		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C6024		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C6025,26		ECEA1AU102	E.CAPACITOR 10V 1000U	2	
C6027		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C6028-34		ECKF1H271KB	C.CAPACITOR 50V 270P	7	
C6035		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6036		ECEA1CKN220	E.CAPACITOR 16V 22U	1	
C6037		ECEA1CKS220	E.CAPACITOR 16V 22U	1	
C6038		ECEA1AK470U	E.CAPACITOR 10V 47U	1	
C6039		ECEA1CKN220	E.CAPACITOR 16V 22U	1	
C6040		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C6901		ECEA1CK330U	E.CAPACITOR 16V 33U	1	
C6902		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6903		ECEA1CK330U	E.CAPACITOR 16V 33U	1	
C6904,05		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C6906		ECKF1H102ZF	C.CAPACITOR 50V 1000P	1	
C6907		ECCF1H470JC	C.CAPACITOR 50V 47P	1	
C6908		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6909		ECQB1H123JH	P.CAPACITOR 50V 0.012U	1	
C6910		ECCF1H180JC	C.CAPACITOR 50V 18P	1	
C6911		ECKF1H681KB	C.CAPACITOR 50V 680P	1	
D1		MA165	DIODE	1	<R>
D2001-04		MA165	DIODE	4	<R>
D2005		10E1	DIODE	1	<R>
D2006-09		MA165	DIODE	4	<R>
D2010		MA4180M	DIODE	1	<R>
D2011,12		MA165	DIODE	2	<R>
D2013		MA4130	DIODE	1	<R>
D2014-16		MA165	DIODE	3	<R>
D2017		FMB-G14L	DIODE	1	<R>
D2018-20		11EQS04	DIODE	3	<R>
D2201-05		MA165	DIODE	5	<R>
D2301		MA165	DIODE	1	<R>
D6001,02		11EQS04	DIODE	2	<R>
D6003,04		MA165	DIODE	2	<R>
D6005		HZ3BLL	DIODE	1	<R>
D6006-08		MA165	DIODE	3	<R>
D6013		10E1	DIODE	1	<R>
D6014-19		MA165	DIODE	6	<R>
D6020		11EQS04	DIODE	1	<R>
D6021-26		MA165	DIODE	6	<R>
D6901,02		MA165	DIODE	2	<R>
IC1		MC14070BC	IC	1	<R>ON VEP00P62A
IC1,2		UPD4538BC	IC	2	<R>
IC2001		MN6742VCRB	IC	1	<R>
IC2002		UPD4053BC	IC	1	<R>
IC2003		AN3726K	IC	1	<R>
IC2004		UPD4066BC	IC	1	<R>
IC2005		UPD4013BC	IC	1	<R>
IC2006		UPC393C	IC	1	<R>
IC2007,08		UPC358C	IC	2	<R>
IC2009		BA6435S	IC	1	<R>
IC2010		MN1280R	IC	1	<R>
IC2011		AN78L05	IC	1	<R>
IC2012		AN3814K	IC	1	<R>
IC2201		UPC339C	IC	1	<R>
IC2301		MC74HCU04N	IC	1	<R>
IC2302		MN53015VZW	IC	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC6001		MN4093B	IC	1	<R>
IC6002		MN1280R	IC	1	<R>
IC6003		UPC339C	IC	1	<R>
IC6004		MN188167VMM	IC	1	<R>
IC6005		M54649L	IC	1	<R>
IC6006		MN4019B	IC	1	<R>
IC6007		MN4093B	IC	1	<R>
IC6008		AN6914	IC	1	<R>
IC6009		AN78M12	IC	1	<R>
L2001		VLQEL05F101K	COIL 100UH	1	
L2003,04		VLQEL05F101K	COIL 100UH	2	
L2006-11		VLQEL05F221K	COIL 220UH	6	
L2201,02		VLQEL05F101K	COIL 100UH	2	
L6002-08		VLQEL05F221K	COIL 220UH	7	
L6901,02		VLQEL05F221K	COIL 220UH	2	
L6903		VLQEL05F220K	COIL 22UH	1	
P1401		VJP1230T	CONNECTOR(MALE) 3P	1	
P2001		VJP1230T	CONNECTOR(MALE) 3P	1	
P2002		VJP1235T	CONNECTOR(MALE) 8P	1	
P2003		VJP1237T	CONNECTOR(MALE) 10P	1	
P2004		VJP1932T	CONNECTOR(MALE) 15P	1	
P2005		VJP1231T	CONNECTOR(MALE) 4P	1	
P2006		VJP1235T	CONNECTOR(MALE) 8P	1	
P2007		VJP1232T	CONNECTOR(MALE) 5P	1	
P2008		VJP1229T	CONNECTOR(MALE) 2P	1	
P2009		VJP1234T	CONNECTOR(MALE) 7P	1	
P2301		VJR0275	9P JACK PIN	1	
P6001		VJP1232T	CONNECTOR(MALE) 5P	1	
P6002		VJP1237T	CONNECTOR(MALE) 10P	1	
P6003		VJP1234R	CONNECTOR(MALE) 7P	1	
P6005		VJP1235R	CONNECTOR(MALE) 8P	1	
P6006		VJP1233T	CONNECTOR(MALE) 6P	1	
P6007		VJP1232T	CONNECTOR(MALE) 5P	1	
P6008		VJP1230T	CONNECTOR(MALE) 3P	1	
P6009		VJP1238T	CONNECTOR(MALE) 11P	1	
P6010,11		VJP1231T	CONNECTOR(MALE) 4P	2	
P6012		VJP1235T	CONNECTOR(MALE) 8P	1	
P6013		VJP1236T	CONNECTOR(MALE) 9P	1	
P6014		VJP1230T	CONNECTOR(MALE) 3P	1	
P6015		VJP1234T	CONNECTOR(MALE) 7P	1	
P6017		VJP1235T	CONNECTOR(MALE) 8P	1	
P6901		VJP1230T	CONNECTOR(MALE) 3P	1	
Q2001		2SD1275	TRANSISTOR	1	(P,Q,R)<R>
Q2004		2SD636	TRANSISTOR	1	(Q,R)<R>
Q2005		2SC2206	TRANSISTOR	1	(B,C)<R>
Q2006-11		2SD636	TRANSISTOR	6	(Q,R)<R>
Q6001		2SD638	TRANSISTOR	1	(Q,R)<R>
Q6001		2SD638	TRANSISTOR	1	(Q,R)<R>
Q6002		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q6003,04		2SB819	TRANSISTOR	2	(Q,R,S)<R>
Q6005-07		2SD636	TRANSISTOR	3	(Q,R)<R>
Q6008		2SD1051	TRANSISTOR	1	<R>
Q6009		2SB643	TRANSISTOR	1	(Q,R)<R>
Q6010-12		2SD636	TRANSISTOR	3	(Q,R)<R>
Q6901		2SB644	TRANSISTOR	1	(P,Q,R)<R>
Q6902,03		2SC2206	TRANSISTOR	2	(B,C)<R>
Q6904		2SD1330	TRANSISTOR	1	(Q,R,S)<R>
Q6905		2SD639	TRANSISTOR	1	(Q,R)<R>
Q6906		2SB793	TRANSISTOR	1	(Q,R)<R>
Q6907		2SD973	TRANSISTOR	1	(Q,R)<R>
QR1-3		UN1113	TRANSISTOR-RESISTOR	3	<R>
QR2002-06		UN1213	TRANSISTOR-RESISTOR	5	<R>
QR2201,02		UN1213	TRANSISTOR-RESISTOR	2	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR6001		UN1212	TRANSISTOR-RESISTOR	1	<R>
QR6002		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR6003-05		UN1213	TRANSISTOR-RESISTOR	3	<R>
QR6006		UN1211	TRANSISTOR-RESISTOR	1	<R>
QR6007		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR6008		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR6009		UN1111	TRANSISTOR-RESISTOR	1	<R>
QR6010		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR6011		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR6012		UN1212	TRANSISTOR-RESISTOR	1	<R>
QR6013		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR6014		UN1215	TRANSISTOR-RESISTOR	1	<R>
QR6015		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR6016-18		UN1213	TRANSISTOR-RESISTOR	3	<R>
QR6019,20		UN1111	TRANSISTOR-RESISTOR	2	<R>
QR6021		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR6022-24		UN1213	TRANSISTOR-RESISTOR	3	<R>
QR6025		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR6026		UN1212	TRANSISTOR-RESISTOR	1	<R>
QR6027		UN1112	TRANSISTOR-RESISTOR	1	<R>
QR6901		UN1211	TRANSISTOR-RESISTOR	1	<R>
R1		ERDS2TJ124	C.RESISTOR 1/4W 120K	1	ON VEPOOP62A
R1,2		ERDS2TJ563	C.RESISTOR 1/4W 56K	2	
R2,3		ERDS2TJ562	C.RESISTOR 1/4W 5600	2	ON VEPOOP62A
R3,4		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R5		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R6		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2001		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2002		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2003		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2004		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R2005		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R2006		ERDS2TJ154	C.RESISTOR 1/4W 150K	1	
R2013-15		ERDS2TJ223	C.RESISTOR 1/4W 22K	3	
R2016		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R2017,18		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	2	
R2019		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2020		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R2022		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2024		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R2025,26		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2027		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R2039,40		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	2	
R2042		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2043		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2044,45		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R2046		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2047		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R2048		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R2049		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R2050		EROS2CKG3303	M.RESISTOR 1/4W 330K	1	
R2052		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2053		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2054		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2055		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2057		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2058		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R2059		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R2060		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R2061,62		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	2	
R2063		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2064		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R2065		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R2066		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R2067		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2068		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R2069		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R2070		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R2071		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R2072		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R2073,74		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2075		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2076		ERDS2TJ684	C.RESISTOR 1/4W 680K	1	
R2077		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R2078		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2079		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R2080		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2081		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R2082		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R2083		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R2084		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R2085		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2086		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2087		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R2088		ERX12SJ1R0	M.RESISTOR 1/2W 1	1	
R2089		EROS2CKG7501	M.RESISTOR 1/4W 7.5K	1	
R2090		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R2091,92		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	2	
R2093		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2094,95		ERDS2TJ330	C.RESISTOR 1/4W 33	2	
R2096		ERX12SJR56	M.RESISTOR 1/2W 0.56	1	
R2097		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R2098		ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R2099-01		ERDS2TJ150	C.RESISTOR 1/4W 15	3	
R2102,03		ERDS2TJ273	C.RESISTOR 1/4W 27K	2	
R2104		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R2105		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R2106		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2107		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2108,09		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2110		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2111,12		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2113		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R2115		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2116		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2117,18		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R2119		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2120		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R2121		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2122		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2123		ERDS2TJ124	C.RESISTOR 1/4W 120K	1	
R2201		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2202		EROS2CKG3300	M.RESISTOR 1/4W 330	1	
R2203		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2204		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2205		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2206,07		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2208		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2209		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2210,11		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2212		ERDS2TJ184	C.RESISTOR 1/4W 180K	1	
R2301		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R2302,03		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R2304		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2305-07		ERDS2TJ153	C.RESISTOR 1/4W 15K	3	
R6001		ERDS1TJ101	C.RESISTOR 1/2W 100	1	
R6002		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R6003		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R6004		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R6005		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R6007		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R6008		ERDS1TJ153	C.RESISTOR 1/2W 15K	1	
R6009		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R6010		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6011		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6013		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6014		ERDS2TJ564	C.RESISTOR 1/4W 560K	1	
R6015		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R6016		ERDS2TJ564	C.RESISTOR 1/4W 560K	1	
R6017		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R6019,20		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R6021		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R6023		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R6024		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R6025		ERDS2TJ564	C.RESISTOR 1/4W 560K	1	
R6026,27		ERDS2TJ563	C.RESISTOR 1/4W 56K	2	
R6028		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6029		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R6030		ERDS2TJ564	C.RESISTOR 1/4W 560K	1	
R6031		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R6032		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R6033		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R6034		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R6036		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6037		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R6038		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R6039,40		ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R6041		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6042,43		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R6044		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R6045		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6046		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R6047		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R6048,49		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R6050		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R6051		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R6052		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R6053		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R6054		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R6055-58		ERDS2TJ103	C.RESISTOR 1/4W 10K	4	
R6059		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6061		ERD2FCVG220	C.RESISTOR 2W 22	1	
R6062		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6063		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R6064		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6065,66		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	2	
R6067-76		ERDS2TJ473	C.RESISTOR 1/4W 47K	10	
R6077,78		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R6079		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R6080		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6081,82		ERDS2TJ184	C.RESISTOR 1/4W 180K	2	
R6083		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6084,85		ERDS2TJ273	C.RESISTOR 1/4W 27K	2	
R6086		ERDS2TJ154	C.RESISTOR 1/4W 150K	1	
R6087		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R6088		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6089,90		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R6091,92		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R6093,94		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R6095-98		ERDS2TJ103	C.RESISTOR 1/4W 10K	4	
R6100		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R6101		ERDS2TJ474	C.RESISTOR 1/4W 470K	1	
R6102		ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R6103		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6104		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R6105		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6106		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R6107		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R6108		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R6109		ERDS1TJ2R2	C.RESISTOR 1/2W 2.2K	1	
R6110		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6901		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R6902		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6903		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6904		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R6905		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R6906		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R6907		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R6908		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R6909		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R6910		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R6911		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6912		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6913		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R6914		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R6915		ERDS2TJ390	C.RESISTOR 1/4W 39	1	
R6916		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R6917-19		ERDS2TJ100	C.RESISTOR 1/4W 10	3	
R6920		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6921		ERDS2TJ391	C.RESISTOR 1/4W 390	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
SW6001		VSS0221	SWITCH	1	<R>
VR2001,02		EVM38GA00B54	V.RESISTOR 50K	2	
VR2003,04		EVM38GA00B15	V.RESISTOR 100K	2	
VR2005		EVM38GA00B23	V.RESISTOR 2K	1	
VR2006,07		EVM38GA00B25	V.RESISTOR 200K	2	
VR2008		EVM38GA00B54	V.RESISTOR 50K	1	
X2001		VSX0214	CRYSTAL OSCILLATOR	1	<R>
X2301		VSX0126	CRYSTAL OSCILLATOR	1	<R>
X6001		VSX0230	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
E52		VMC0075	HEAT SINK SPRING	1	
E53		VMZ0960	BARRIER	1	<!><R>
E54		VSC1068	HEAT SINK	1	(FOR Q2001)
E55		VSC1689	HEAT SINK	1	(FOR IC2009)
	■	VEP02328A	REEL SERVO C.B.A.		
C2501,02		ECEA1EU331	E.CAPACITOR 25V 330U	2	
C2503		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C2504		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C2505		ECCF1H820JC	C.CAPACITOR 50V 82P	1	
C2506		ECKF1H561KB	C.CAPACITOR 50V 560P	1	
C2507		ECKF1H271KB	C.CAPACITOR 50V 270P	1	
C2508-10		ECEA1HK010	E.CAPACITOR 50V 1U	3	
C2511,12		ECEA1EU221	E.CAPACITOR 25V 220U	2	
C2513		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2514		ECKF1H102ZF	C.CAPACITOR 50V 1000P	1	
C2516		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C2519		ECEA1HKR22	E.CAPACITOR 50V 0.22U	1	
C2520		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C2522		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C2523		ECEA1HKR22	E.CAPACITOR 50V 0.22U	1	
C2524		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C2526		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C2527		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2530,31		ECCF1H330JC	C.CAPACITOR 50V 33P	2	
C2532		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C2534		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C2536-38		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C2539,40		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C2541		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C2542		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2543		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C2545,46		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	2	
C2547-49		ECQB1H472JH	P.CAPACITOR 50V 4700P	3	
C2550		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2551		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C2552		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C2553		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2555,56		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	2	
C2557-59		ECQB1H472JH	P.CAPACITOR 50V 4700P	3	
C2560		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2561,62		ECEA0JK220	E.CAPACITOR 6.3V 22U	2	
C2563,64		ECKF1H102ZF	C.CAPACITOR 50V 1000P	2	
C2565,66		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C2567		ECQB1H222JH	P.CAPACITOR 50V 2200P	1	
C2568		ECQV1H823JZ	P.CAPACITOR 50V 0.082U	1	
C2569		ECEA1CKN220	E.CAPACITOR 16V 22U	1	
C2570,71		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C2572		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2573		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2574		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2575		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2576-81		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	6	
C2583,84		ECEA1EK470	E.CAPACITOR 25V 47U	2	
C2585		ECKF1H102ZF	C.CAPACITOR 50V 1000P	1	
C2586		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C2587		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C2588		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C2589,90		ECKF1H221KB	C.CAPACITOR 50V 220P	2	
C2591		ECEA1EK470	E.CAPACITOR 25V 47U	1	
C2592		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
D2501,02		11EQS04	DIODE	2	<R>
D2503-05		MA165	DIODE	3	<R>
D2506		11EQS04	DIODE	1	<R>
D2507-12		MA165	DIODE	6	<R>
D2513		MA4100M	DIODE	1	<R>
D2514		MA4110M	DIODE	1	<R>
IC2501		BA6149LS	IC	1	<R>
IC2502		AN3621NK	IC	1	<R>
IC2503		MN15542VMN	IC	1	<R>
IC2504		UPD4069UBC	IC	1	<R>
IC2505		UPC339C	IC	1	<R>
IC2506		UPC358C	IC	1	<R>
IC2507		UPD4053BC	IC	1	<R>
IC2508,09		AN3834K	IC	2	<R>
IC2510		MN1280R	IC	1	<R>
IC2511		UPD4069UBC	IC	1	<R>
IC2512		UPD4053BC	IC	1	<R>
IC2513		UPC324C	IC	1	<R>
IC2514		UPC358C	IC	1	<R>
L2501,02		VLQ0129	COIL 300UH	2	
L2503		VLQEL05F101K	COIL 100UH	1	
P2501		VJP1232T	CONNECTOR(MALE) 5P	1	
P2502		VJP1230T	CONNECTOR(MALE) 3P	1	
P2503		VJP1235T	CONNECTOR(MALE) 8P	1	
P2504,05		VJS1493	CONNECTOR(FEMALE) 15P	2	
P2506,07		VJP1230T	CONNECTOR(MALE) 3P	2	
Q2501,02		2SB772	TRANSISTOR	2	(P,Q,R)<R>
Q2503		2SD636	TRANSISTOR	1	(Q,R)<R>
Q2504		2SD1275	TRANSISTOR	1	(P,Q,R)<R>
QR2504		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR2506		UN1215	TRANSISTOR-RESISTOR	1	<R>
QR2507-09		UN1213	TRANSISTOR-RESISTOR	3	<R>
QR2510		UN1215	TRANSISTOR-RESISTOR	1	<R>
QR2511,12		UN1213	TRANSISTOR-RESISTOR	2	<R>
QR2513,14		UN1113	TRANSISTOR-RESISTOR	2	<R>
QR2516		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR2517,18		UN1213	TRANSISTOR-RESISTOR	2	<R>
QR2519		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR2520,21		UN1213	TRANSISTOR-RESISTOR	2	<R>
R2501		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2502,03		ERDS2TJ154	C.RESISTOR 1/4W 150K	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2504		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R2505		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R2506		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R2507		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R2508		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R2509		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2510		ERDS2TJ334	C.RESISTOR 1/4W 330K	1	
R2511		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R2513		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2517		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R2518,19		ERDS2TJ123	C.RESISTOR 1/4W 12K	2	
R2520		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R2521,22		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2523		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R2524		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R2525		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R2526		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R2532		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R2534,35		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2536,37		ERDS2TJ474	C.RESISTOR 1/4W 470K	2	
R2538,39		ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R2543		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R2544,45		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R2547		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R2548-51		ERDS2TJ103	C.RESISTOR 1/4W 10K	4	
R2561		EROS2CKG2202	M.RESISTOR 1/4W 22K	1	
R2562		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2564		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2565		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R2566		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R2567		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R2570		ERX12SJ1R0	M.RESISTOR 1/2W 1	1	
R2571		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R2574		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2575		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2578		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R2579		ERX12SJR56	M.RESISTOR 1/2W 0.56	1	
R2580		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R2581		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R2586		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R2587		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2588		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R2589,90		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2591		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2592,93		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2594		ERQ12HJ3R9P	FUSE 1/2W 3.9	1	
R2595		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R2596		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R2597		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2598		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R2599		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2600		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2601		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2602		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R2603		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2604		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R2605		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2606		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R2607,08		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	2	
R2609		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R2610		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2611		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2612		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R2613		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2614		EROS2CKG2202	M.RESISTOR 1/4W 22K	1	
R2615-18		ERDS2TJ104	C.RESISTOR 1/4W 100K	4	
R2619-21		ERDS2TJ330	C.RESISTOR 1/4W 33	3	
R2622		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R2623		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R2624,25		ERDS2TJ330	C.RESISTOR 1/4W 33	2	
R2626,27		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R2628,29		ERX12SJR82	M.RESISTOR 1/2W 0.82	2	
R2630		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R2631		ERDS2TJ394	C.RESISTOR 1/4W 390K	1	
R2633		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2634		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2635		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R2637		EROS2CKG2201	M.RESISTOR 1/4W 2.2K	1	
R2638		EROS2CKG1801	M.RESISTOR 1/4W 1.8K	1	
R2639		EROS2CKG1501	M.RESISTOR 1/4W 1.5K	1	
R2640		EROS2CKG2201	M.RESISTOR 1/4W 2.2K	1	
R2641		EROS2CKG1801	M.RESISTOR 1/4W 1.8K	1	
R2642		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R2643		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R2644		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R2645		ERDS2TJ184	C.RESISTOR 1/4W 180K	1	
R2646		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2647		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2648		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R2649		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R2651,52		ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R2653-55		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R2656		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R2657-59		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R2660		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R2661		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R2662		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
RA2501,02		EXBLD4103G	COMBI R-R	2	
X2501		VSX0136	CRYSTAL OSCILLATOR	1	<R>
X2502		VSX0128	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
E57		VMP2076	ANGLE	1	
E58		VSC2763	SHIELD CASE (BOTTOM)	1	
E59		VSC2761	SHIELD CASE (TOP)	1	
E60		VSC2762	SHIELD CASE (MAIN)	1	
E61		VMX1637	SPACER	1	
E62		VSC2850	SHIELD PLATE	1	
	■	VEP04249A	NORMAL AUDIO C.B.A.		INCLUDING THE
					TIME CODE C.B.A.
					(VEP00K28A)
					SUB AUDIO (A) C.B.A.
					(VEP00M57A)
					SUB AUDIO (B) C.B.A.
					(VEP00M58A)
					AUDIO OSC C.B.A.
					(VEP00M67A)
C4001		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C4002		VCEA1CAC470	E.CAPACITOR 16V 47U	1	
C4003-20		VCEA1CAC100	E.CAPACITOR 16V 10U	18	
C4021		VCEA1HAC010	E.CAPACITOR 50V 1U	1	
C4022		VCEA1CAC470	E.CAPACITOR 16V 47U	1	
C4023		VCEA1HAC010	E.CAPACITOR 50V 1U	1	
C4024		VCEA1CAC470	E.CAPACITOR 16V 47U	1	
C4025-28		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	4	
C4029,30		VCEA1CAC100	E.CAPACITOR 16V 10U	2	
C4031,32		VCEA1CA330	E.CAPACITOR 16V 33U	2	
C4033		VCEA1CAC100	E.CAPACITOR 16V 10U	1	
C4034,35		VCEA1CA330	E.CAPACITOR 16V 33U	2	
C4036		VCEA1CAC100	E.CAPACITOR 16V 10U	1	
C4037		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4038,39		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	2	
C4040,41		VCEA1CAC470	E.CAPACITOR 16V 47U	2	
C4042		VCEA1HAC010	E.CAPACITOR 50V 1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4043		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4044		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C4045		VCEA1HAC010	E.CAPACITOR 50V 1U	1	
C4046		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4047		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C4048		ECQB1H183JH	P.CAPACITOR 50V 0.018U	1	
C4049		ECQB1H182JH	P.CAPACITOR 50V 1800P	1	
C4050		VCEA1CAC101	E.CAPACITOR 16V 100U	1	
C4051,52		VCEA1HAC010	E.CAPACITOR 50V 1U	2	
C4053		VCEA1CAC470	E.CAPACITOR 16V 47U	1	
C4054		ECQB1H183JH	P.CAPACITOR 50V 0.018U	1	
C4055		ECQB1H182JH	P.CAPACITOR 50V 1800P	1	
C4056		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4057		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4058		VCEA1CAC470	E.CAPACITOR 16V 47U	1	
C4059		VCEA1VAC3R3	E.CAPACITOR 35V 3.3U	1	
C4060		VCEA1CAC470	E.CAPACITOR 16V 47U	1	
C4061		ECCF1H330JC	C.CAPACITOR 50V 33P	1	
C4062		VCEA1CAC470	E.CAPACITOR 16V 47U	1	
C4063		ECCF1H330JC	C.CAPACITOR 50V 33P	1	
C4064		VCEA1CAC470	E.CAPACITOR 16V 47U	1	
C4065		VCEA1VAC3R3	E.CAPACITOR 35V 3.3U	1	
C4066		ECEA1CK330U	E.CAPACITOR 16V 33U	1	
C4067		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4068		ECCF1H330JC	C.CAPACITOR 50V 33P	1	
C4069		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4070		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4071		ECKF1H1022F	C.CAPACITOR 50V 1000P	1	
C4072		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4073		VCEA1CAC100	E.CAPACITOR 16V 10U	1	
C4074		VCEA1CAC470	E.CAPACITOR 16V 47U	1	
C4075		ECEA1CK330U	E.CAPACITOR 16V 33U	1	
C4076		ECEA1HKR33	E.CAPACITOR 50V 0.33U	1	
C4077		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4078,79		VCEA1CAC100	E.CAPACITOR 16V 10U	2	
C4080,81		ECCD2H151J	C.CAPACITOR 500V 150P	2	
C4201		VCEA1CAC101N	E.CAPACITOR 16V 100U	1	
C4202		ECEA1CM33	E.CAPACITOR 10V 33U	1	
C4203		VCEA1HAD010J	E.CAPACITOR 50V 1U	1	
C4204		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4205		VCEA1CAC100N	E.CAPACITOR 16V 10U	1	
C4206		VCEA1HAC010	E.CAPACITOR 50V 1U	1	
C4207		ECQB1H273JZ	P.CAPACITOR 50V 0.027U	1	
C4208		ECEA16M10	E.CAPACITOR 16V 10U	1	
C4209		ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C4210		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4211		ECEA1CM33	E.CAPACITOR 10V 33U	1	
C4212		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4213		VCEA1EAC4R7	E.CAPACITOR 25V 4.9U	1	
C4214		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C4215		VCEA1HAC2R2	E.CAPACITOR 50V 2.2U	1	
C4216		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C4217		ECQV1H184JZ	P.CAPACITOR 50V 0.18U	1	
C4219		ECEA1CU471	E.CAPACITOR 16V 470U	1	
C4220		VCEA1CAD100J	E.CAPACITOR 16V 10U	1	
C4221,22		VCEA1CAC100N	E.CAPACITOR 16V 10U	2	
C4223		ECQB1H223JZ	P.CAPACITOR 50V 0.022U	1	
C4224		VCEA0JAC221	E.CAPACITOR 6.3V 220U	1	
C4225		ECQV1H334JZ	P.CAPACITOR 50V 0.33U	1	
C4226		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C4227		VCEA1CAC100N	E.CAPACITOR 16V 10U	1	
C4228		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C4229		VCEA1CAC101N	E.CAPACITOR 16V 100U	1	
C4230		VCEA1CAE221E	E.CAPACITOR 16V 220U	1	
C4231		VCEA1CAC100N	E.CAPACITOR 16V 10U	1	
C4232		ECQB1H472JZ	P.CAPACITOR 50V 4700P	1	
C4233		ECQB1H273JZ	P.CAPACITOR 50V 0.027U	1	
C4234		VCEA1HAC010	E.CAPACITOR 50V 1U	1	
C4235		ECQB1H562JZ	P.CAPACITOR 50V 5600P	1	
C4236		ECQB1H472JZ	P.CAPACITOR 50V 4700P	1	
C4237		VCEA1CAC100N	E.CAPACITOR 16V 10U	1	
C4238		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4239		ECQB1H392JZ	P.CAPACITOR 50V 3900P	1	
C4240		ECUM1H562KBN	C.CAPACITOR CH 50V 5600P	1	
C4301-04		VCEA1CAC100N	E.CAPACITOR 16V 10U	4	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4305,06		VCEA1CAC470	E.CAPACITOR 16V 47U	2	
C4307,08		VCEA1CAC100N	E.CAPACITOR 16V 10U	2	
C4309		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C4310,11		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C4312,13		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	2	
C4314		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4315		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C4316,17		VCEA1CAC100N	E.CAPACITOR 16V 10U	2	
C4401,02		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C4403		ECQM1H332JV	P.CAPACITOR 50V 3300P	1	
C4404		ECQM1H682JV	P.CAPACITOR 50V 6800P	1	
C4405,06		ECCD2H151J	C.CAPACITOR 500V 150P	2	
C4407		ECQF6182KZ	P.CAPACITOR 630V 1800P	1	
C4408,09		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	2	
C4410		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C4901		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	
C4902		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4903,04		ECEA1HKN010	E.CAPACITOR 50V 1U	2	
C4906		ECUM1H561KBN	C.CAPACITOR CH 50V 560P	1	
C4907		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C4908,09		ECEA1CKS330	E.CAPACITOR 16V 33U	2	
D4001		MA4056M	DIODE	1	<R>
D4002-12		MA165	DIODE	11	<R>
D4013		RD5.6EB2	ZENER 5.6V	1	<R>
D4201-07		MA151K	DIODE	7	<R>
D4301,02		OA90AM	DIODE	2	<R>
D4303		MA3043	DIODE	1	<R>
D4304,05		OA90AM	DIODE	2	<R>
D4306		MA3043	DIODE	1	<R>
D4307,08		MA151K	DIODE	2	<R>
D4401,02		MA165	DIODE	2	<R>
FL4201		VLF0402	FILTER	1	
IC4001,02		UPC4558C	IC	2	<R>
IC4003		UPD4066BC	IC	1	<R>
IC4004,05		M51132L	IC	2	<R>
IC4006		AN360	IC	1	<R>
IC4007,08		UPC4558C	IC	2	<R>
IC4009		UPD4066BC	IC	1	<R>
IC4201		NE646N	IC	1	<R>
IC4202		HA12005	IC	1	<R>
IC4301		MN4066BS	IC	1	<R>
IC4302		AN6552S	IC	1	<R>
IC4303,04		MN4066BS	IC	2	<R>
IC4305-07		AN6552S	IC	3	<R>
IC4901		AN6912	IC	1	<R>
L4001		VLQ0123	COIL	1	
L4002		VLQEL05F102K	COIL 1000UH	1	
L4003		VLQ0123	COIL	1	
L4301		VLQ0207K221	COIL 220UH	1	
L4302		VLQEL05F102K	COIL 1MH	1	
L4401		VLQ24F102K25	COIL	1	
P4001		VJP1230T	CONNECTOR(MALE) 3P	1	
P4002		VJP1230R	CONNECTOR(MALE) 3P	1	
P4003		VJP1235R	CONNECTOR(MALE) 8P	1	
P4004		VJP1232T	CONNECTOR(MALE) 5P	1	
P4005		VJP1230T	CONNECTOR(MALE) 3P	1	
P4006,07		VJP1231T	CONNECTOR(MALE) 4P	2	
P4008		VJP1233G	CONNECTOR(MALE) 6P	1	
P4009		VJP1233T	CONNECTOR(MALE) 6P	1	
P4010		VJP1233R	CONNECTOR(MALE) 6P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
P4011		VJP1230T	CONNECTOR(MALE) 3P	1	
P4012		VJP1236T	CONNECTOR(MALE) 9P	1	
P4013		VJP1231R	CONNECTOR(MALE) 4P	1	
P4014		VJP1231B	CONNECTOR(MALE) 4P	1	
P4015		VJP1230T	CONNECTOR(MALE) 3P	1	
P4016		VJP1231T	CONNECTOR(MALE) 4P	1	
P4017		VJP1235T	CONNECTOR(MALE) 8P	1	
P4018		VJP1230R	CONNECTOR(MALE) 3P	1	
P4019		VJP1235T	CONNECTOR(MALE) 8P	1	
P4020		VJP1233T	CONNECTOR(MALE) 6P	1	
P4021		VJP1231G	CONNECTOR(MALE) 4P	1	
P4022,23		VJP1232T	CONNECTOR(MALE) 5P	2	
Q4001		2SD638	TRANSISTOR	1	(Q,R,S)<R>
Q4002-04		2SD636	TRANSISTOR	3	(Q,R)<R>
Q4005		2SB641	TRANSISTOR	1	(Q,R)<R>
Q4008,09		2SD636	TRANSISTOR	2	(Q,R)<R>
Q4201-04		2SD601	TRANSISTOR CHIP	4	(Q,R,S)<R>
Q4205		2SD1328	TRANSISTOR CHIP	1	(S,T)<R>
Q4206-08		2SD601	TRANSISTOR CHIP	3	(Q,R,S)<R>
Q4209		2SB709	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q4401		2SB643	TRANSISTOR	1	(Q,R,S)<R>
Q4403		2SD973A	TRANSISTOR	1	(R)<R>
Q4404,05		2SD636	TRANSISTOR	2	(Q,R)<R>
Q4406,07		2SD958	TRANSISTOR	2	(R,S,T)<R>
Q4408		2SB788	TRANSISTOR	1	(R,S)<R>
Q4409,10		2SD958	TRANSISTOR	2	(R,S,T)<R>
Q4411		2SB788	TRANSISTOR	1	(R,S)<R>
Q4901,02		2SD601	TRANSISTOR CHIP	2	(Q,R)<R>.
QR4001-04		UN1213	TRANSISTOR-RESISTOR	4	<R>
QR4005,06		UN1211	TRANSISTOR-RESISTOR	2	<R>
QR4007-09		UN1113	TRANSISTOR-RESISTOR	3	<R>
QR4011-13		UN1113	TRANSISTOR-RESISTOR	3	<R>
QR4015,16		UN1213	TRANSISTOR-RESISTOR	2	<R>
QR4020,21		UN1113	TRANSISTOR-RESISTOR	2	<R>
QR4022		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR4023		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR4024		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR4025		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR4026-29		UN1213	TRANSISTOR-RESISTOR	4	<R>
QR4030,31		UN1215	TRANSISTOR-RESISTOR	2	<R>
QR4032		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR4033		DTC144WA	TRANSISTOR RESISTOR	1	<R>
QR4036		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR4039		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR4041		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR4044		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR4201		UN2211	TRANSISTOR-RESISTOR	1	<R>
QR4202		UN2111	TRANSISTOR-RESISTOR	1	<R>
QR4203		UN2213	TRANSISTOR-RESISTOR	1	<R>
QR4301-04		UN2213	TRANSISTOR-RESISTOR	4	<R>
QR4305		UN2211	TRANSISTOR-RESISTOR	1	<R>
QR4401		UN1221	TRANSISTOR-RESISTOR	1	<R>
QR4901		UN2211	TRANSISTOR-RESISTOR	1	<R>
R4001		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R4003		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4004		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4005		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4006		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4007,08		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R4009-12		ERDS2TJ273	C.RESISTOR 1/4W 27K	4	
R4013-16		ERDS2TJ333	C.RESISTOR 1/4W 33K	4	
R4017-20		ERDS2TJ104	C.RESISTOR 1/4W 100K	4	
R4021,22		ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R4023,24		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R4025		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4026		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4027		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4028		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R4029		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R4030		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4031		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R4032		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4033		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R4034		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4035		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R4036		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4037		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4038		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4039		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4040		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4041		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4042		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4043		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4044		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4047,48		ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R4049,50		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R4051,52		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	2	
R4053		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R4054,55		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R4056,57		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R4058		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4059		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4060		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R4061		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4063		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R4064		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4065		ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R4066		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R4067		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R4068		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R4069		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4071		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4072		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R4076		ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R4077,78		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R4079		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4080,81		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R4082,83		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	2	
R4084		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4086		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4088		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R4089		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R4090		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R4091		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R4092		ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R4093		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R4094		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R4095		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R4096		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R4099		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R4100		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R4101-03		ERDS2TJ223	C.RESISTOR 1/4W 22K	3	
R4104-07		ERDS2TJ2R2	C.RESISTOR 1/4W 2.2	4	
R4108,09		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	2	
R4110		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4112,13		ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R4114		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4114		ERDS2TJ2R2	C.RESISTOR 1/4W 2.2	1	
R4201		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4202		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R4203		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4204		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4205		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R4206		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4207		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4208		ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R4209,10		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R4211		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4212		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4213		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4214		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4215		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R4216		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4217		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R4218		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4219		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4220		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4221		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4222		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4223		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R4224,25		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4226		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R4227		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4228		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R4229		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4230		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4231		ERJ6GEYJ184	M.RESISTOR CH 1/10W 180K	1	
R4232		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4233		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4234		ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R4235		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4236		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4237		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R4238		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4239		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R4240		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4241		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4242		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R4301,02		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R4303-06		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	4	
R4307,08		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	2	
R4309,10		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R4311,12		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4313		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4314-17		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	4	
R4318-20		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	3	
R4321		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4323		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4324-26		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	3	
R4401		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R4402		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R4404		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R4405		ERDS2TJ4R7	C.RESISTOR 1/4W 4.7	1	
R4406-09		ERDS2TJ103	C.RESISTOR 1/4W 10K	4	
R4410		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R4411		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R4412,13		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R4414		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R4415		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R4416,17		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R4418,19		ERDS2TJ155	C.RESISTOR 1/4W 1.5M	2	
R4901		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R4902,03		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R4904		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4905		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R4906		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R4907		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4908		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4909		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R4910		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4911		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R4912		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4913		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4914		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4915		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R4916		ERJ6GEYJ560	M.RESISTOR CH 1/10W 56	1	
R4917		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4918		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4919		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4920		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4921		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4922		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4923,24		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R4925,26		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4927		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4928		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4929		ERJ6GEYJ564	M.RESISTOR CH 1/10W 560K	1	
R4930,31		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
RY4001,02		VSY1015	RELAY	2	<R>
RY4003		VSY2035	RELAY	1	<R>
RY4401,02		VSY2032	RELAY	2	<R>
T4401		VLT0538	TRANSFORMER	1	
VR4001-04		EVN38CA00B13	V.RESISTOR 1K	4	
VR4005		EVN38CA00B53	V.RESISTOR 5K	1	
VR4006		EVN38CA00B24	V.RESISTOR 20K	1	
VR4007		EVN38CA00B53	V.RESISTOR 5K	1	
VR4008		EVN38CA00B24	V.RESISTOR 20K	1	
VR4009,10		EVN38CA00B54	V.RESISTOR 50K	2	
VR4011-15		EVN38CA00B53	V.RESISTOR 5K	5	
VR4016,17		EVN38CA00B25	V.RESISTOR 200K	2	
			MISCELLANEPUS		
E63		VMP2078	ANGLE	1	
E64		VJR0189	10P PACK PIN	2	
E65		VJR0231	6P PACK PIN	5	
E66		VJR0188	8P PACK PIN	1	
E67		VJR0275	9P PACK PIN	2	
E68		VJR0277	3P PACK PIN	1	
E69		VJR0163	9P PACK PIN	1	
	■	VEP04250A	HI-FI AUDIO C.B.A.		
C4601,02		VCEA1CAC470	E.CAPACITOR 16V 47U	2	
C4603		VCEA1CAE221E	E.CAPACITOR 16V 220U	1	
C4604		VCEA1CAC101	E.CAPACITOR 16V 100U	1	
C4605		ECQB1H682JH	P.CAPACITOR 50V 6800P	1	
C4606		ECQB1H102JH	P.CAPACITOR 50V 1000P	1	
C4607		ECQB1H223JH	P.CAPACITOR 50V 0.022U	1	
C4608		VCEA1EAC4R7	E.CAPACITOR 25V 4.7U	1	
C4609		ECQB1H223JH	P.CAPACITOR 50V 0.022U	1	
C4610		VCEA1EAC100J	E.CAPACITOR 25V 10U	1	
C4611		VCEA1CAC470	E.CAPACITOR 16V 47U	1	
C4612		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4613		ECQB1H332JH	P.CAPACITOR 50V 3300P	1	
C4614-16		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	3	
C4617		VCEA1EAC3R3J	E.CAPACITOR 25V 3.3U	1	
C4618		VCEA1AAC101	E.CAPACITOR 10V 100U	1	
C4619		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4620,21		ECUX1H470KCN	C.CAPACITOR CH 50V 47P	2	
C4622		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4623		VCEA1AAC101	E.CAPACITOR 10V 100U	1	
C4624		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4626		ECUM1H381KBN	C.CAPACITOR CH 50V 330P	1	
C4627		VCEA1HAC010	E.CAPACITOR 50V 1U	1	
C4628		ECQV1H683JZ	P.CAPACITOR 50V 0.068U	1	
C4629,30		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C4631		VCEA1AAC101	E.CAPACITOR 10V 100U	1	
C4632		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4633,34		ECUX1H680KCN	C.CAPACITOR CH 50V 68P	2	
C4635		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4636		VCEA1EAC3R3J	E.CAPACITOR 25V 3.3U	1	
C4637-39		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	3	
C4640		ECQB1H332JH	P.CAPACITOR 50V 3300P	1	
C4641		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4642		VCEA1EAC4R7	E.CAPACITOR 25V 4.7U	1	
C4643		ECQB1H223JH	P.CAPACITOR 50V 0.022U	1	
C4644		VCEA1EAC100J	E.CAPACITOR 25V 10U	1	
C4645		ECQB1H102JH	P.CAPACITOR 50V 1000P	1	
C4646		ECQB1H223JH	P.CAPACITOR 50V 0.022U	1	
C4647		ECQB1H682JH	P.CAPACITOR 50V 6800P	1	
C4648,49		VCEA1EAC4R7	E.CAPACITOR 25V 4.7U	2	
C4650		VCEA1CAC101	E.CAPACITOR 16V 100U	1	
C4651		VCEA1CAC220	E.CAPACITOR 16V 22U	1	
C4652		VCEA1AAC101	E.CAPACITOR 10V 100U	1	
C4653-57		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	5	
C4658		VCEA1CAC470	E.CAPACITOR 16V 47U	1	
C4659		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4660,61		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C4662		VCEA1HACR10	E.CAPACITOR 50V 0.1U	1	
C4663		VCEA1HAC2R2	E.CAPACITOR 50V 2.2U	1	
C4664		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C4665		VCEA0JAC470	E.CAPACITOR 6.3V 47U	1	
C4666,67		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C4668		ECQV1H154J2	P.CAPACITOR 50V 0.15U	1	
C4669		ECUM1H331KBN	C.CAPACITOR CH 50V 330P	1	
C4670		ECUM1H682KBN	C.CAPACITOR CH 50V 6800P	1	
C4671		ECCF1H221JC	C.CAPACITOR 50V 220P	1	
C4672,73		VCEA1CA330	E.CAPACITOR 16V 33U	2	
C4674		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4675		VCEA1CAC470	E.CAPACITOR 16V 47U	1	
C4676		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4677		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C4678		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4679		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4680,81		VCEA1HAC010	E.CAPACITOR 50V 1U	2	
D4601		MA4056M	DIODE	1	<R>
D4602-05		MA151K	DIODE	4	<R>
FL4601		VLF0697	FILTER	1	
FL4602		VLF0696	FILTER	1	
IC4601		BA7700K1	IC	1	<R>
IC4602		UPC78L05J	IC	1	<R>
IC4603,04		NJM2233BDA	IC	2	<R>
IC4605		AN3920K	IC	1	<R>
L4601-03		VLQEL05F101K	COIL 100UH	3	
L4604		VLQEL05F121K	COIL 120UH	1	
L4605		VLQEL05F101K	COIL 100UH	1	
P4601		VJP1231T	CONNECTOR(MALE) 4P	1	
P4602,03		VJP1233T	CONNECTOR(MALE) 6P	2	
P4604		VJP1231T	CONNECTOR(MALE) 4P	1	
P4605		VJP1235T	CONNECTOR(MALE) 8P	1	
P4606		VJP1231T	CONNECTOR(MALE) 4P	1	
Q4601		2SD638	TRANSISTOR	1	(Q,R,S)<R>
Q4602-06		2SB710	TRANSISTOR CHIP	5	(Q,R,S)<R>
Q4607,08		2SD1330	TRANSISTOR	2	(Q,R,S)<R>
Q4609,10		2SD601	TRANSISTOR CHIP	2	(Q,R)<R>
QR4601		UN2213	TRANSISTOR-RESISTOR	1	<R>
QR4602		UN2113	TRANSISTOR-RESISTOR	1	<R>
QR4603,04		UN2213	TRANSISTOR-RESISTOR	2	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR4605-07		UN2113	TRANSISTOR-RESISTOR	3	<R>
QR4608		UN2215	TRANSISTOR-RESISTOR	1	<R>
QR4609-12		UN2213	TRANSISTOR-RESISTOR	4	<R>
QR4613,14		UN2112	TRANSISTOR-RESISTOR	2	<R>
QR4615		UN2213	TRANSISTOR-RESISTOR	1	<R>
QR4616		UN2113	TRANSISTOR-RESISTOR	1	<R>
QR4617-20		UN2213	TRANSISTOR-RESISTOR	4	<R>
QR4621		UN2115	TRANSISTOR-RESISTOR	1	<R>
QR4622		UN2213	TRANSISTOR-RESISTOR	1	<R>
R4601		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R4602		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4603		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4604		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4605-08		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	4	
R4609,10		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R4611,12		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R4613		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4614,15		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R4616		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4617,18		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	2	
R4619,20		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R4621		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4622,23		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	2	
R4624,25		ERJ6GEYG821	M.RESISTOR CH 1/10W 820	2	
R4626		ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1	
R4627		ERJ6GEYG112	M.RESISTOR CH 1/10W 1.1K	1	
R4628		ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4629		ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1	
R4630		ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4631		ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R4632		ERJ6GEYG561	M.RESISTOR CH 1/10W 560	1	
R4634		ERJ6GEYG333	M.RESISTOR CH 1/10W 33K	1	
R4637		ERJ6GEYG912	M.RESISTOR CH 1/10W 9.1K	1	
R4639		ERJ6GEYG393	M.RESISTOR CH 1/10W 39K	1	
R4640		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4641		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4642		ERJ6GEYG203	M.RESISTOR CH 1/10W 20K	1	
R4643		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4644		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R4645		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4646		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4647		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4648,49		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R4651		ERJ6GEYG123	M.RESISTOR CH 1/10W 12K	1	
R4655		ERJ6GEYG333	M.RESISTOR CH 1/10W 33K	1	
R4657		ERJ6GEYG561	M.RESISTOR CH 1/10W 560	1	
R4658		ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R4659		ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4660		ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1	
R4661		ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4662		ERJ6GEYG112	M.RESISTOR CH 1/10W 1.1K	1	
R4663		ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1	
R4664,65		ERJ6GEYG821	M.RESISTOR CH 1/10W 820	2	
R4666		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4667,68		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R4669		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R4670,71		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R4672		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R4673		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4674		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4675,76		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	2	
R4677,78		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	2	
R4679		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4680		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4681		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4682,83		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R4684		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R4685		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4686,87		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4688-90		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	3	
R4691		ERJ6GEYG472	M.RESISTOR CH 1/10W 4.7K	1	
R4692		ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4693,94		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
VR4601		EVN38CA00B53	V.RESISTOR 5K	1	
VR4602		EVN38CA00B23	V.RESISTOR 2K	1	
VR4603		EVN38CA00B53	V.RESISTOR 5K	1	
VR4604		EVN38CA00B23	V.RESISTOR 2K	1	
VR4605,06		EVN38CA00B24	V.RESISTOR 20K	2	
VR4607		EVM38GA00B13	V.RESISTOR 1K	1	
VR4608		EVM38GA00B23	V.RESISTOR 2K	1	
VR4611		EVN38CA00B15	V.RESISTOR 100K	1	
VR4612		EVN38CA00B54	V.RESISTOR 50K	1	
VR4613		EVN38CA00B24	V.RESISTOR 20K	1	
			MISCELLANEOUS		
E70		VMP2077	ANGLE	1	
	■	VEP05138A	HEAD AMP C.B.A.		
C4701		ECEA1HKSR22	E.CAPACITOR 50V 0.22U	1	
C4702		ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	1	
C4703,04		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C4705		ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	1	
C4706		ECEA1HKSR22	E.CAPACITOR 50V 0.22U	1	
C4707		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4708		ECEA0JKS330	E.CAPACITOR 6.3V 33U	1	
C4709		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C4710		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4711		ECUX1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C4712-14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C4715		ECUX1H391JCN	C.CAPACITOR CH 50V 390P	1	
C4716,17		ECUX1H560JCN	C.CAPACITOR CH 50V 56P	2	
C4718-21		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C5001		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C5002		ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C5003		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C5005-08		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C5009		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C5010		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C5011		ECEA1HKS010	E.CAPACITOR 50V 1U	1	
C5012		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C5013		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C5014,15		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C5016		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C5018		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	
C5019,20		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	2	
C5021		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	
C5023		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C5024		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C5025		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	
C5027,28		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C5029		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	
C5031		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C5032		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C5033		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C5035		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
D4701		MA151WK	DIODE	1	<R>
D5001-03		MA151K	DIODE	3	<R>
IC4701		UPC1531HA	IC	1	<R>
IC5001		AN3334K	IC	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
K5001		VSY2041	RELAY	1	<R>
L4701,02		VLQ0207K101	COIL 100UH	2	
L5001		VLQ0207K221	COIL 220UH	1	
L5003,04		VLQ0207K101	COIL 100UH	2	
P4701		VJP1248T	CONNECTOR(MALE) 8P	1	
P5001		VJS1927	CONNECTOR(FEMALE) 10P	1	
P5002		VJP1246T	CONNECTOR(MALE) 6P	1	
P5003		VJP1235T	CONNECTOR(MALE) 8P	1	
Q4701		2SB709	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q4702		2SD601	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q4703		2SB643	TRANSISTOR	1	(Q,R,S)<R>
Q4704-06		2SD1328	TRANSISTOR CHIP	3	(Q,R)<R>
Q5001,02		2SD601	TRANSISTOR CHIP	2	(Q,R,S)<R>
Q5003,04		2SC2295	TRANSISTOR CHIP	2	(B,C)<R>
QR4701,02		2SD1777CI	TRANSISTOR-RESISTOR	2	(R)<R>
QR5003		UN2213	TRANSISTOR-RESISTOR	1	<R>
R4701		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4702		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R4703,04		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R4705		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4706		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R4707		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4708,09		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	2	
R4710,11		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	2	
R4712		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R4713		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R4714		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4715		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4716		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4717		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4718		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4719		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R4720		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4721,22		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	2	
R4723,24		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R5001		ERJ6GEYK1R0	M.RESISTOR CH 1/10W 1	1	
R5002		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R5003		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R5005		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R5006		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R5007		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R5008		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R5009		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R5010		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R5012-15		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	4	
R5016		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R5017		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R5018		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R5019,20		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	2	
R5021		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R5022		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R5023		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R5024,25		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	2	
R5028		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			MISCELLANEOUS		
E71		VSC2758	SHIELD CASE (MAIN)	1	
E72		VSC2759	SHIELD CASE (TOP)	1	
E73		VSC2760	SHIELD CASE (BOTTOM)	1	
	■	VEP03586A	VIDEO C.B.A.		INCLUDING THE
					Y/C PACK C.B.A.
					(VEP03587A)
					Y/C NR PACK C.B.A.
					(VEP03615A)
C30001		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30002		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30003		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30004		ECCF1H270JC	C.CAPACITOR 50V 27P	1	
C30005		ECCF1H471J	C.CAPACITOR 50V 470P	1	
C30006		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30009,10		ECEA1HK010	E.CAPACITOR 50V 1U	2	
C30011		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30012		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C30013		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C30014		ECQP1H102GZ	P.CAPACITOR 50V 1000P	1	
C30015		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C30016		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30017		ECQV1H333JZ	P.CAPACITOR 50V 0.033U	1	
C30018		ECCF1H121JC	C.CAPACITOR 50V 120P	1	
C30019		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C30020		ECCF1H271JC	C.CAPACITOR 50V 270P	1	
C30021		ECCF1H820JC	C.CAPACITOR 50V 82P	1	
C30023		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C30024,25		VCCF1H271GC	C.CAPACITOR 50V 270P	2	
C30026		VCCF1H820GC	C.CAPACITOR 50V 82P	1	
C30029		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C30030		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30031		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C30032,33		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	2	
C30034		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30035		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30036		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30037,38		ECCF1H101JC	C.CAPACITOR 50V 100P	2	
C30039		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30040-42		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C30043		ECCF1H470JC	C.CAPACITOR 50V 47P	1	
C30045-47		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C30048		ECCF1H181JC	C.CAPACITOR 50V 180P	1	
C30049		ECCF1H820JC	C.CAPACITOR 50V 82P	1	
C30050		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30051		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30052,53		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C30054		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30055		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C30056		ECCF1H560JC	C.CAPACITOR 50V 56P	1	
C30057		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30059		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C30060		ECQP1H821GZ	P.CAPACITOR 50V 820P	1	
C30061		ECEA0JK331	E.CAPACITOR 6.3V 330U	1	
C30062-64		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C30065		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30066,67		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C30071		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30072		ECCF1H820JC	C.CAPACITOR 50V 82P	1	
C30073		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30074		ECCF1H390JC	C.CAPACITOR 50V 39P	1	
C30075		ECCF1H100DC	C.CAPACITOR 50V 10P	1	
C30076		ECCF1H270JC	C.CAPACITOR 50V 27P	1	
C30077		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30078		ECCF1H330JC	C.CAPACITOR 50V 33P	1	
C30079		ECCF1H270JC	C.CAPACITOR 50V 27P	1	
C30080		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C30081		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C30082		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30083		ECCF1H820JC	C.CAPACITOR 50V 82P	1	
C30084		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C30085		ECCF1H080DC	C.CAPACITOR 50V 8P	1	
C30086		ECQB1H102JH	P.CAPACITOR 50V 1000P	1	
C30087		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30088		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C30090		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30091		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C30092-95		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	4	
C30096		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30097		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30098		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30099-03		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	5	
C30104		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C30105		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30106		ECEA1AK220	E.CAPACITOR 10V 22U	1	
C30107		ECCF1H390JC	C.CAPACITOR 50V 39P	1	
C30108		ECQB1H153JH	P.CAPACITOR 50V 0.015U	1	
C30109		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30111,12		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C30113		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30114,15		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C30116		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30117-19		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C30120		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C30121		ECCF1H150JC	C.CAPACITOR 50V 15P	1	
C30122		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C30123		ECCF1H681J	C.CAPACITOR 50V 680P	1	
C30125		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C30126		ECCF1H151JC	C.CAPACITOR 50V 150P	1	
C30127		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30128		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30129		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30131		ECCF1H820JC	C.CAPACITOR 50V 82P	1	
C30132,33		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C30134		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30135		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C30136		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30137		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30138		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C30139		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C30140		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30141		ECCF1H151JC	C.CAPACITOR 50V 150P	1	
C30142		ECCF1H121JC	C.CAPACITOR 50V 120P	1	
C30143		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30144		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C30145		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30146-57		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	12	
C30163,64		ECKF1H102KB	C.CAPACITOR 50V 1000P	2	
C30167		ECCF1H271JC	C.CAPACITOR 50V 270P	1	
C30168		ECCF1H330JC	C.CAPACITOR 50V 33P	1	
C30169		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C30170		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C30171		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C30172		ECQM1H102JV	P.CAPACITOR 50V 1000P	1	
C30173		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C30174,75		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C30176		ECCF1H120JC	C.CAPACITOR 50V 12P	1	
C31044-48		ECEA0JK470	E.CAPACITOR 6.3V 47U	5	
C31049		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C31050		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C31052		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C31053		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31054		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C31055		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31056		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C31057-59		ECEA0JK470	E.CAPACITOR 6.3V 47U	3	
C31061,62		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C31063		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C31064-66		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C31067		ECEA1CU331	E.CAPACITOR 16V 330U	1	
C31068		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31069,70		ECEA1AU471	E.CAPACITOR 10V 470U	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C31071		ECEA1AK470U	E.CAPACITOR 10V 47U	1	
C31072,73		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C31074		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31075		ECEA1CU221	E.CAPACITOR 16V 220U	1	
C31076,77		ECEA1AU471	E.CAPACITOR 10V 470U	2	
C31078		ECEA1AK470U	E.CAPACITOR 10V 47U	1	
C31079		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C31080,81		ECEA1AU471	E.CAPACITOR 10V 470U	2	
C31082		ECEA1AK470U	E.CAPACITOR 10V 47U	1	
C31083		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C31084		ECEA1CU221	E.CAPACITOR 16V 220U	1	
C31085		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31086		ECEA0JU101	E.CAPACITOR 6.3V 100U	1	
C31087		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C31088		ECCF1H680JC	C.CAPACITOR 50V 68P	1	
C31089		ECEA1HU010	E.CAPACITOR 50V 1U	1	
C31090		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C31091		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
C31092-94		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C31095,96		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C31097		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C31098		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C31099		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C31100		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31101		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C31102		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31103		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C31104		ECEA1HKR22	E.CAPACITOR 50V 0.22U	1	
C31105		ECV1ZW20X64T	V.CAPACITOR 20P	1	
C31106		ECCF1H150JC	C.CAPACITOR 50V 15P	1	
C31107		ECCF1H270JC	C.CAPACITOR 50V 27P	1	
C31108		ECCF1H470JC	C.CAPACITOR 50V 47P	1	
C31109,10		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C31111		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C31112		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C31113,14		ECCF1H080DC	C.CAPACITOR 50V 8P	2	
C31115,16		ECKF1H102ZF	C.CAPACITOR 50V 1000P	2	
C31117		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31118		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C31119		ECEA1HKR33	E.CAPACITOR 50V 0.33U	1	
C31120		ECCF1H221JC	C.CAPACITOR 50V 220P	1	
C31121		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C31122		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C31123		ECQB1H681JH	P.CAPACITOR 50V 680P	1	
C31124		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C31125		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31126		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C31127		ECKF1H561KB	C.CAPACITOR 50V 560P	1	
C31128		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31129-31		ECEA0JK470	E.CAPACITOR 6.3V 47U	3	
C31132		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31133,34		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C31135		ECCF1H470JC	C.CAPACITOR 50V 47P	1	
C31136		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C31137		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31138,39		ECEA1CK470U	E.CAPACITOR 16V 47U	2	
C31140		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31141		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C31142		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C31143		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C31144		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31145		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C31146,47		ECKF1H561KB	C.CAPACITOR 50V 560P	2	
C31148		ECCF1H180JC	C.CAPACITOR 50V 18P	1	
C31149		ECCF1H470JC	C.CAPACITOR 50V 47P	1	
C31150		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31151		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C31152		ECKF1H102ZF	C.CAPACITOR 50V 1000P	1	
C31153		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C31154,55		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C31156		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C31157		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C31158		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C31161,62		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C31164		ECCF1H150JC	C.CAPACITOR 50V 15P	1	
C31165		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C31166		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C31167		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C31168		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C31169		ECCF1H270JC	C.CAPACITOR 50V 27P	1	
C32001		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C32002		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C32003		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C32004		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C32005		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C32006		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C32007		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C32008		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C32009		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C32010,11		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	2	
C32012		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C32013		ECEA0JKA331	E.CAPACITOR 6.3V 330U	1	
C32014		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C32015		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C32016		ECQB1H562JH	P.CAPACITOR 50V 5600P	1	
C32017		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C32018		ECEA0JKA331	E.CAPACITOR 6.3V 330U	1	
C32019		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C32020		ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C32021		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C32022		ECEA1AKA470	E.CAPACITOR 10V 47U	1	
C32023		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C32024		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C32025		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C32026		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C32027		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C32028		ECEA1AKN100	E.CAPACITOR 10V 10U	1	
C32029		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C32030		ECEA1AKN100	E.CAPACITOR 10V 10U	1	
C32031,32		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C32033		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C32034		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C32035		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C32036		ECUM1H050DCN	C.CAPACITOR CH 50V 50P	1	
C32037		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C32038		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C32039		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C32040		ECEA1HK3R3I	E.CAPACITOR 50V 3.3U	1	
C32041		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C32042		ECEA2524R7	E.CAPACITOR 25V 4.7U	1	
C32043		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C32044		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C32045		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C32046		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C32047		ECUM1H223ZFN	C.CAPACITOR CH 50V 0.022U	1	
C32048		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C32049		ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C32050		ECQV1H124JZ	P.CAPACITOR 50V 0.12U	1	
C32051		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C32052		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C32053		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C32054,55		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C32056		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C32057		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C32060		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C32061		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C32062,63		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C32065		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C32066		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C32067		ECV1ZW60X60	TRIMMER	1	
C32069-71		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C32072		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C32073		ECEA1AKA101	E.CAPACITOR 10V 100U	1	
C32074,75		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C32076		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C32077,78		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C32079		ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C32080		ECQV1H154JZ	P.CAPACITOR 50V 0.15U	1	
C32081		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C32082		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C32083		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C32086		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C32087-90		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C32093		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C32094		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C32095		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C32097		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C34001		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C34002		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C34003,04		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C34005-07		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3	
C34008		ECUM1E334ZFM	C.CAPACITOR CH 25V 0.33U	1	
C34009		ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C34010		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C34011		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C34012		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C34013		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C34014		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C34015		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C34016		ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C34017		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C34018		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C34019		ECEA1AKA220	E.CAPACITOR 10V 22U	1	
C34020		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C34021		ECEA1AKA220	E.CAPACITOR 10V 22U	1	
C34022-24		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3	
C34025		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C34026		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C34027-29		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3	
C34030		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C34031,32		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C34033		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C34034		ECUM1H223ZFN	C.CAPACITOR CH 50V 0.022U	1	
C34035		ECEA1AKN100	E.CAPACITOR 10V 10U	1	
C34036		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C34038,39		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C34040		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
D30001-06		MA165	DIODE	6	<R>
D30007		MA4033	DIODE	1	<R>
D30008-18		MA165	DIODE	11	<R>
D30019		1SS99	DIODE	1	<R>
D30021-24		MA165	DIODE	4	<R>
D31006,07		MA165	DIODE	2	<R>
D31009-24		MA165	DIODE	16	<R>
D31026,27		MA165	DIODE	2	<R>
D32001,02		MA151K	DIODE	2	<R>
D32003		MA151WK	DIODE	1	<R>
D32004-08		MA151K	DIODE	5	<R>
D32010		1SS283	DIODE	1	<R>
D34001		MA4091	DIODE	1	<R>
D34002		MA151WK	DIODE	1	<R>
D34003		MA151K	DIODE	1	<R>
DL30001		VLD0126	DELAY	1	
DL30002		ELB4R031	FILTER	1	
DL30003		ELB4Q053	FILTER	1	
DL31003,04		VLD0153	DELAY	2	
DL32002		EFDVR645A45A	DELAY LINE	1	
DL34001		VLD0089	DELAY	1	
FL30001		VLF0639	FILTER	1	
FL30002		VLF0581	FILTER	1	
FL30003		ELB5A066	FILTER	1	
FL32001		VLF0499	FILTER	1	
FL32002		ELB4M022	FILTER	1	
FL32003		VLF0063	FILTER	1	
FL32004		VLF0299	FILTER	1	
FL34001		VLF0567	FILTER	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC30001		AN6306	IC	1	<R>
IC30002		VC2031DP	IC	1	<R>
IC30003		MN74HC4053	IC	1	<R>
IC30004		MN4053B	IC	1	<R>
IC30005		AN3321K	IC	1	<R>
IC30006		M52054SP	IC	1	<R>
IC30007		AN78L05	IC	1	<R>
IC30008		AN78L05A	IC	1	<R>
IC30009		MN74HC221	IC	1	<R>
IC31002,03		M52055P	IC	2	<R>
IC31004		M51647SP	IC	1	<R>
IC31005		M52055P	IC	1	<R>
IC31007		M50455-001SP	IC	1	<R>
IC31008		NJM2217L	IC	1	<R>
IC31009		MN4066B	IC	1	<R>
IC31010		MN1280P	IC	1	<R>
IC31011		UPC339C	IC	1	<R>
IC32001		VEFH03D	HIC	1	<R>
IC32002		AN6308S	IC	1	<R>
IC32003		M52056GP	IC	1	<R>
IC34001		MSM6965-3RS	IC	1	<R>
IC34002		AN3495K	IC	1	<R>
L30001-03		VLQEL05F101K	COIL 100UH	3	
L30004		VLQEL05F1R0K	COIL 1UH	1	
L30005		VLQEL05F101K	COIL 100UH	1	
L30006		VLQEL05R681J	COIL 680UH	1	
L30007,08		VLQEL05F101K	COIL 100UH	2	
L30010		VLQEL05F151J	COIL 150UH	1	
L30011		VLQEL05F820J	COIL 82UH	1	
L30013,14		VLQEL05F101K	COIL 100UH	2	
L30015		VLQEL05F100J	COIL 10UH	1	
L30016,17		VLQEL05F180J	COIL 18UH	2	
L30018		VLQEL05F120J	COIL 12UH	1	
L30019		VLQEL05F150J	COIL 15UH	1	
L30020		VLQEL05F6R8K	COIL 6.8UH	1	
L30021		VLQEL05R560J	COIL 56UH	1	
L30022-24		VLQEL05F101K	COIL 100UH	3	
L30025		VLQEL05F390J	COIL 39UH	1	
L30026		VLQEL05F391J	COIL 390UH	1	
L30028		VLQEL05F101K	COIL 100UH	1	
L30029		VLQEL05F120J	COIL 12UH	1	
L30030		VLQEL05R101J	COIL 100UH	1	
L30031		VLQEL05F150K	COIL 15UH	1	
L30032		VLQEL05F101K	COIL 100UH	1	
L30033		VLQEL05F270J	COIL 27UH	1	
L30034		VLQEL05F151J	COIL 150UH	1	
L30035,36		VLQEL05F101K	COIL 100UH	2	
L30042		VLQEL05F6R8K	COIL 6.8UH	1	
L30043		VLQEL05F6R8J	COIL 6.8U	1	
L30045		VLQEL05R560J	COIL 56UH	1	
L31009		VLQEL05F101K	COIL 100UH	1	
L31015		VLQEL05F101K	COIL 100UH	1	
L31016		VLQEL05R560J	COIL 56UH	1	
L31017		VLQEL05F101K	COIL 100UH	1	
L31020-22		VLQEL05F101K	COIL 100UH	3	
L31024,25		VLQEL05F101K	COIL 100UH	2	
L31026		VLQEL05F270J	COIL 27UH	1	
L31027,28		VLQEL05F101K	COIL 100UH	2	
L31029		VLQEL05F470J	COIL 47UH	1	
L31030		VLQEL05F180J	COIL 18UH	1	
L31031,32		VLQEL05F101K	COIL 100UH	2	
L31033		VLQEL05F150J	COIL 15UH	1	
L31034		VLQEL05F270J	COIL 27UH	1	
L31035		VLQEL05F101K	COIL 100UH	1	
L31038		VLQEL05R560J	COIL 56UH	1	
L32001		VLQEL05F121J	COIL 120UH	1	
L32002		VLQEL05F221	COIL 220UH	1	
L32003		VLQEL05F151J	COIL 150UH	1	
L32004		VLQEL05F101K	COIL 100UH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L32005		VLQEL05F220J	COIL 22UH	1	
L32006,07		VLQEL05F101K	COIL 100UH	2	
L32008		VLQEL05F470J	COIL 47UH	1	
L32009		VLQEL05F101K	COIL 100UH	1	
L32013		VLQEL05F150J	COIL 15UH	1	
L32015		VLQEL05F330J	COIL 33UH	1	
L32016,17		VLQEL05F681J	COIL 680UH	2	
L32018		VLQEL05F331J	COIL 330UH	1	
L32019		VLQEL05F470J	COIL 47UH	1	
L32020-22		VLQEL05F101K	COIL 100UH	3	
L32025		VLQEL05F221J	COIL 220UH	1	
L32026		VLQEL05F560J	COIL 56UH	1	
L34001-03		VLQ0207K101	COIL 100UH	3	
L34004,05		VLQEL05F150J	COIL 15UH	2	
P30003		VJP1235T	CONNECTOR(MALE) 8P	1	
P30004,05		VJP1233T	CONNECTOR(MALE) 6P	2	
P30006		VJP1235T	CONNECTOR(MALE) 8P	1	
P30007		VJP1230T	CONNECTOR(MALE) 3P	1	
P30008		VJP1231T	CONNECTOR(MALE) 4P	1	
P30009		VJP1230T	CONNECTOR(MALE) 3P	1	
P30010		VJP1231R	CONNECTOR(MALE) 4P	1	
P30011		VJP1231T	CONNECTOR(MALE) 4P	1	
P30012		VJP1232T	CONNECTOR(MALE) 5P	1	
P30013		VJP1234R	CONNECTOR(MALE) 7P	1	
P30014		VJP1235T	CONNECTOR(MALE) 8P	1	
P30015		VJP1236T	CONNECTOR(MALE) 9P	1	
P30016		VJP1233T	CONNECTOR(MALE) 6P	1	
P30018		VJP1231T	CONNECTOR(MALE) 4P	1	
Q30001		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q30003-06		2SB641	TRANSISTOR	4	(Q,R,S)<R>
Q30007		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30008,09		2SD636	TRANSISTOR	2	(Q,R,S)<R>
Q30010		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30011-14		2SD636	TRANSISTOR	4	(Q,R,S)<R>
Q30015		2SA1254	TRANSISTOR	1	<R>
Q30016		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30017		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q30018		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q30019-21		2SD636	TRANSISTOR	3	(Q,R,S)<R>
Q30022,23		2SC2206	TRANSISTOR	2	(B,C)<R>
Q30024		2SB641	TRANSISTOR	1	(Q,R,S)<R.
Q30025		2SA1254	TRANSISTOR	1	<R>
Q30027-29		2SD636	TRANSISTOR	3	(Q,R,S)<R>
Q30030		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30031		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q30032		2SB643	TRANSISTOR	1	(Q,R,S)<R>
Q30033		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q30034		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30035-39		2SD636	TRANSISTOR	5	(Q,R,S)<R>
Q30040		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30042		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q30043		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q30044		2SC2206	TRANSISTOR	1	(B,C)<R>
Q30045		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q31007		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q31009		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q31013		2SA1254	TRANSISTOR	1	<R>
Q31014		2SC2206	TRANSISTOR	1	(B,C)<R>
Q31015		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q31016		2SC2206	TRANSISTOR	1	(B,C)<R>
Q31017		2SA1254	TRANSISTOR	1	<R>
Q31018-20		2SD636	TRANSISTOR	3	(Q,R,S)<R>
Q31021		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q31022		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q31023		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q31024		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q31025,26		2SB641	TRANSISTOR	2	(Q,R,S)<R>
Q31027		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q31028		2SB641	TRANSISTOR	1	(Q,R,S)<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q31029		2SA1254	TRANSISTOR	1	<R>
Q31030		2SC2206	TRANSISTOR	1	(B,C)<R>
Q31031		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q31032		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q31033		2SA1254	TRANSISTOR	1	<R>
Q31034,35		2SC2206	TRANSISTOR	2	(B,C)<R>
Q31036		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q31037		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q31038		2SC2206	TRANSISTOR	1	(B,C)<R>
Q31039		2SA1254	TRANSISTOR	1	<R>
Q31040		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q31041-45		2SD636	TRANSISTOR	5	(Q,R,S)<R>
Q31046		2SC2206	TRANSISTOR	1	(B,C)<R>
Q31047		2SA1254	TRANSISTOR	1	<R>
Q31048-51		2SD636	TRANSISTOR	4	(Q,R,S)<R>
Q31053		2SD636	TRANSISTOR	1	(Q,R,S)<R>
Q31055		2SB641	TRANSISTOR	1	(Q,R,S)<R>
Q32001		2SD601	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q32002,03		2SB709	TRANSISTOR CHIP	2	(Q,R,S)<R>
Q32004-07		2SD601	TRANSISTOR CHIP	4	(Q,R,S)<R>
Q32009		2SB709	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q32010		2SD601	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q34001,02		2SC2295	TRANSISTOR CHIP	2	(B,C)<R>
Q34004		2SC2295	TRANSISTOR CHIP	1	(B,C)<R>
Q34005		2SD601	TRANSISTOR CHIP	1	(Q,R,S)<R>
QR30001,02		UN1213	TRANSISTOR-RESISTOR	2	<R>
QR30003		UN1212	TRANSISTOR-RESISTOR	1	<R>
QR30004		UN1112	TRANSISTOR-RESISTOR	1	<R>
QR30005,06		UN1213	TRANSISTOR-RESISTOR	2	<R>
QR30007		UN1211	TRANSISTOR-RESISTOR	1	<R>
QR30008-10		UN1213	TRANSISTOR-RESISTOR	3	<R>
QR30011		UN1212	TRANSISTOR-RESISTOR	1	<R>
QR30012		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR30014		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR30015		UN1111	TRANSISTOR-RESISTOR	1	<R>
QR30016,17		UN1212	TRANSISTOR-RESISTOR	2	<R>
QR30018,19		UN1213	TRANSISTOR-RESISTOR	2	<R>
QR30021		UN1122	TRANSISTOR-RESISTOR	1	<R>
QR30022		UN1213	TRANSISTOR-RESISTOR	1	<R>
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QR30028-30		UN1213	TRANSISTOR-RESISTOR	3	<R>
QR30031		UN1212	TRANSISTOR-RESISTOR	1	<R>
QR30032		UN1213	TRANSISTOR-RESISTOR	1	<R>
QR31001,02		UN1213	TRANSISTOR-RESISTOR	2	<R>
QR31003		UN1212	TRANSISTOR-RESISTOR	1	<R>
QR31005		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR31006-09		UN1213	TRANSISTOR-RESISTOR	4	<R>
QR31010		UN1212	TRANSISTOR-RESISTOR	1	<R>
QR31011		UN1213	TRANSISTOR-RESISTOR	1	<R>
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QR31013-15		UN1213	TRANSISTOR-RESISTOR	3	<R>
QR31016		UN1113	TRANSISTOR-RESISTOR	1	<R>
QR32001,02		UN2212	TRANSISTOR-RESISTOR	2	<R>
QR32003		UN2213	TRANSISTOR-RESISTOR	1	<R>
QR32006-12		UN2213	TRANSISTOR-RESISTOR	7	<R>
QR32013,14		UN2113	TRANSISTOR-RESISTOR	2	<R>
QR32015		UN2213	TRANSISTOR-RESISTOR	1	<R>
QR32016		UN2212	TRANSISTOR-RESISTOR	1	<R>
QR32017		UN2213	TRANSISTOR-RESISTOR	1	<R>
QR32018		UN2113	TRANSISTOR-RESISTOR	1	<R>
QR32019		UN2213	TRANSISTOR-RESISTOR	1	<R>
QR34001		UN2213	TRANSISTOR-RESISTOR	1	<R>
R30001,02		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	2	
R30003,04		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R30005		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R30006		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30007		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30009		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30011		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R30012		ERDS2TJ181	C.RESISTOR 1/4W 180	1	
R30013		ERDS2TJ274	C.RESISTOR 1/4W 270K	1	
R30014		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30015		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R30016		EROS2CKG2200	M.RESISTOR 1/4W 220	1	
R30017-19		ERDS2TJ102	C.RESISTOR 1/4W 1K	3	
R30020		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30021-23		ERDS2TJ102	C.RESISTOR 1/4W 1K	3	
R30024		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R30025,26		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30027		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R30028		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30029		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30031		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R30032		EROS2CKG1001	M.RESISTOR 1/4W 1K	1	
R30033		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R30034		EROS2CKG3301	M.RESISTOR 1/4W 3.3K	1	
R30035		EROS2CKG1001	M.RESISTOR 1/4W 1K	1	
R30036		EROS2CKG4700	M.RESISTOR 1/4W 470	1	
R30037		EROS2CKG1001	M.RESISTOR 1/4W 1K	1	
R30039		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R30041		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30042		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30043		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30044		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30045		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R30046		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R30047		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30048		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R30049		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R30050		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30051		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30052		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30053		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R30054,55		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	2	
R30056		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30057		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R30058		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30059,60		ERDS2TJ681	C.RESISTOR 1/4W 680	2	
R30061		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R30062,63		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30065		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R30066,67		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30068-70		ERDS2TJ223	C.RESISTOR 1/4W 22K	3	
R30071		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30072		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30073		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R30074		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R30075		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R30076		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30077		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30078		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R30079		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30080		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30081		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R30082		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R30083		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30084		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30085,86		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30087		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30088		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30089		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30090-92		ERDS2TJ102	C.RESISTOR 1/4W 1K	3	
R30094		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R30095		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R30096		EROS2CKG2700	M.RESISTOR 1/4W 270	1	
R30097		EROS2CKG1201	M.RESISTOR 1/4W 1.2K	1	
R30098		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R30099		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R30100-02		ERDS2TJ102	C.RESISTOR 1/4W 1K	3	
R30103		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R30104		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R30106		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R30107		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R30108		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30109		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30110		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30111		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R30112		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30113		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R30114		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30115,16		ERDS2TJ561	C.RESISTOR 1/4W 560	2	
R30117,18		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R30119		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R30120		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30121		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30122		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R30123		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R30124		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30125		ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R30126		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R30127		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R30128		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R30129,30		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30132		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R30133		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R30134		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30135		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R30136		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30137		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30138		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R30139		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R30140		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R30141		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30142		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30143		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R30144		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R30145		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30146		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R30147,48		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30149		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R30150		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30151		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R30152		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R30154		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R30155		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R30156		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30157		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R30159		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R30160		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30161		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30162		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R30163		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30164		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30165		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30166		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30167		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30168		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30169,70		ERDS2TJ333	C.RESISTOR 1/4W 33K	2	
R30171		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30173		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R30174		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R30175,76		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R30177		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R30178		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30179		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R30180		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30181		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R30182		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30183		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R30184		ERDS2TJ184	C.RESISTOR 1/4W 180K	1	
R30185		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30186,87		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R30188		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30189-94		ERDS2TJ223	C.RESISTOR 1/4W 22K	6	
R30195		ERDS2TJ330	C.RESISTOR 1/4W 33	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R30196		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30197		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R30198		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30199,00		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R30201		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30202		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30207		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R30208		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R30209		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30210		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R30211		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R30212		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30213		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R30214		ERDS2TJ2R2	C.RESISTOR 1/4W 2.2	1	
R30215,16		ERDS2TJ1R0	C.RESISTOR 1/4W 1.0	2	
R30217		ERDS2TJ2R2	C.RESISTOR 1/4W 2.2	1	
R30218		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R30219		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R30220		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R30221		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R30223		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R31016		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31017		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R31040,41		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R31042		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31051		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R31053		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31055		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R31056		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R31057		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R31058		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R31059,60		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R31061		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R31062		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R31064		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31065		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R31066		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31067,68		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R31069		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31070		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R31071		ERDS2TJ220	C.RESISTOR 1/4W 22	1	
R31072		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R31073		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R31076		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31077		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R31078,79		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R31080-83		ERDS2TJ750	C.RESISTOR 1/4W 75	4	
R31084		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R31085		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R31086		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R31087		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R31088		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31089,90		ERDS2TJ101	C.RESISTOR 1/4W 100	2	
R31091		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R31092		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R31093		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31094		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R31095		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R31096		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R31097		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R31098		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R31099		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31100		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R31101		EROS2CKG7500	M.RESISTOR 1/4W 750	1	
R31102,03		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R31104		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R31105		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31106		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R31107		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R31108,09		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R31110,11		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R31112		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R31113		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R31114		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R31115		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R31116		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R31117		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R31118		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R31119		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31120		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R31121		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R31122		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R31123		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31124		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R31125		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31126		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R31127		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31128		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R31129,30		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R31131		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31132		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31133		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R31134		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R31135		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R31136		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R31137-40		ERDS2TJ471	C.RESISTOR 1/4W 470	4	
R31141		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31142		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R31143		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R31144		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R31145		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R31146		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R31147		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R31148,49		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	2	
R31150		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R31151		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R31152		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31153		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R31154		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31155		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R31156		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R31157		EROS2CKG9100	M.RESISTOR 1/4W 910	1	
R31158,59		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R31160		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R31161		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R31162		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31163		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R31164		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R31165		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R31166		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R31167		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R31168		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R31169		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31170,71		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	2	
R31172		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31173		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R31174		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R31176		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31177		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R31178		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R31179		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31180		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R31181		EROS2CKG9100	M.RESISTOR 1/4W 910	1	
R31182		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R31183		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31184		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R31185		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31186		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R31187,88		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R31189		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R31190		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31191,92		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R31193		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R31194,95		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R31196,97		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R31198		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R31199		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31200		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R31201,02		ERDS2TJ224	C.RESISTOR 1/4W 220K	2	
R31203		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R31204		EROS2CKG1002	M.RESISTOR 1/4W 10K	1	
R31205		EROS2CKG3300	M.RESISTOR 1/4W 330	1	
R31206		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31207		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R31208		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31209		ERDS2TJ184	C.RESISTOR 1/4W 180K	1	
R31210-12		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
R31213		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R31214,15		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R31216		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R31217,18		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	2	
R31219		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R31220		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R31221		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R31222		ERDS2TJ274	C.RESISTOR 1/4W 270K	1	
R31223		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R31224		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31228		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R31229		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R31230		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R31231		ERDS2TJ330	C.RESISTOR 1/4W 33	1	
R31232		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R31233		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R32001		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R32002		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R32003		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R32004,05		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R32006		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R32007		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R32009		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R32010		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R32012		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R32013		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R32014		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R32015		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R32016		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R32017		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R32018		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R32019		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R32020		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R32021		ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R32022		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R32023		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R32024		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R32025-28		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	4	
R32029		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R32030-32		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R32033,34		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R32035		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R32036		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R32037,38		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R32039		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R32040		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R32041		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R32042		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R32043		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R32044		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R32045		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R32046		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R32047		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R32049		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R32050		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R32051		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R32052		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R32053		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R32054		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R32056		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R32057,58		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R32059		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R32060		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R32061		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R32062		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R32063		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R32065-68		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	4	
R32069		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R32070		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R32071		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R32072,73		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R32074,75		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R32076		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R32077		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R32078		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R32080-82		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R32083		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R32084		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R32085		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R32086		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R32087		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R32091		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R32093		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R32094		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R32095,96		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R32097		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R32098		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R32099		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R32100		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R32101		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R32103		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R32104		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R32105		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R34001		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R34002		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R34003		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R34004		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R34005		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R34006		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R34007		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R34008		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R34009		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R34010		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R34011		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R34012		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R34013		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R34016		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R34017		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R34018		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R34019		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R34020		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R34021		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R34022		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R34023		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R34024		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R34025		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R34026,27		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R34028,29		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R34030		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
TH30001		ERTD2FHL202S	THERMISTOR	1	<R>
VR30001		EVN38CA00B23	V.RESISTOR 2K	1	
VR30002,03		EVM38GA00B53	V.RESISTOR 5K	2	
VR30004,05		EVM38GA00B54	V.RESISTOR 50K	2	
VR30006		EVM38GA00B52	V.RESISTOR 500	1	
VR30007		EVM38GA00B14	V.RESISTOR 10K	1	
VR30008		EVM38GA00B22	V.RESISTOR 200	1	
VR30009,10		EVN38CA00B13	V.RESISTOR 1K	2	
VR30011,12		EVN38CA00B22	V.RESISTOR 200	2	
VR30013		EVN38CA00B23	V.RESISTOR 2K	1	
VR30015		EVN38CA00B24	V.RESISTOR 20K	1	
VR30016,17		EVN38CA00B14	V.RESISTOR 10K	2	
VR30020		EVM38GA00B23	V.RESISTOR 2K	1	
VR31008		EVN38CA00B23	V.RESISTOR 2K	1	
VR31009		EVN38CA00B14	V.RESISTOR 10K	1	
VR32001		EVND1AA00B24	VARIABLE 20K	1	
VR32002		EVND1AA00B54	V.RESISTOR 50K	1	
VR34001		EVND1AA00B14	V.RESISTOR 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
VR34002		EVND1AA00B24	VARIABLE 20K	1	
VR34003		EVND1AA00B52	V.RESISTOR 500	1	
VR34004		EVND1AA00B13	V.RESISTOR 1K	1	
X31001		VSX0114	CRYSTAL OSCILLATOR	1	<R>
X32001		VSX0162B	CRYSTAL OSCILLATOR	1	<R>
X34001		VSX0225	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
E75		VJR0189	10P PACK PIN	4	
E76		VJR0231	6P PACK PIN	1	
E77		VJR0188	8P PACK PIN	1	
E78		VJR0232	13P PACK PIN	1	
	■	VEP03622A	Y/C SEPARATION C.B.A.		
C35001		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C35002		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C35003		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C35004		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C35005		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C35006,07		ECEA0JKA101	E.CAPACITOR 6.3V 100U	2	
C35008		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C35009		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C35010		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C35011		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C35012-14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C35015		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C35016		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C35017		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C35018		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C35020-22		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C35023		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C35024		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C35025,26		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C35027		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C35028,29		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C35033		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C35034-37		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C35038		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C35041		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C35042		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C35043		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C35044		ECQM1H272JV	P.CAPACITOR 50V 2700P	1	
C35045		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C35046,47		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	2	
C35048		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C35049		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C35050		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C35051		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C35052		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C35053		ECUM1H331KBN	C.CAPACITOR CH 50V 330P	1	
C35054		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	
C35055,56		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C35057		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C35058-60		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C35061		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C35062-70		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	9	
C35071		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C35072		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C35073		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C35074		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C35075		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C35076		ECEA1EK470	E.CAPACITOR 25V 47U	1	
C35077-79		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C35080		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C35081,82		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C35083		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C35084		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C35085		ECEA1HKS2R2	E.CAPACITOR 50V 2.2U	1	
C35086		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C35088		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C35089		ECEA1CU331	E.CAPACITOR 16V 330U	1	
C35090		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C35091-93		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C35094		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C35095		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C35096		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C35097,98		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C35099		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C35100		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C35101		ECEA1HKS2R2	E.CAPACITOR 50V 2.2U	1	
C35102-04		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C35105		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C35106,07		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C35108		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C35109		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C35110-12		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C35116		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C35151-64		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	14	
C35165		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C35166-68		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C35169		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C35170		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C35171		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	1	
C35172		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C35173-76		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C35178,79		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C35180-84		ECEA1CKS100	E.CAPACITOR 16V 10U	5	
C35185-93		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	9	
C35194		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
D35001		MA4051M	DIODE	1	<R>
D35002		MA151WK	DIODE	1	<R>
D35003		MA3047M	DIODE	1	<R>
FL35001,02		VLF0526	FILTER	2	
FL35003		VLF0568	FILTER	1	
FL35005,06		VLF0568	FILTER	2	
FL35007,08		VLF0523	FILTER	2	
FL35009		VLF0639	FILTER	1	
FL35012,13		VLF0523	FILTER	2	
FL35014,15		VLF0581	FILTER	2	
FL35016-18		VLF0526	FILTER	3	
FL35019-27		VLF0523	FILTER	9	
IC35001		BA7001	IC	1	<R>
IC35002		NJM082BM	IC	1	<R>
IC35004		CXD1175M	IC	1	<R>
IC35005		AN79L05	IC	1	<R>
IC35006		AN79L12	IC	1	<R>
IC35008		CXD1175M	IC	1	<R>
IC35009		AN78L05.	IC	1	<R>
IC35010,11		MN74HC221S	IC	2	<R>
IC35012		MN74HC74S	IC	1	<R>
IC35013		MN74HC08S	IC	1	<R>
IC35014		AN612	IC	1	<R>
IC35015		MN74HC74S	IC	1	<R>
IC35016		AN78L05	IC	1	<R>
IC35017		AN79L05	IC	1	<R>
IC35018		NJM082BM	IC	1	<R>
IC35019		MN4053BS	IC	1	<R>
IC35020		NJM082BM	IC	1	<R>
IC35021		UPC358G	IC	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC35022		MB40778P	IC	1	<R>
IC35023		AN78L05	IC	1	<R>
IC35024		MN4053BS	IC	1	<R>
IC35025		MB40778P	IC	1	<R>
IC35026		AN78L05	IC	1	<R>
IC35027,28		MN4053BS	IC	2	<R>
IC35029		SN74LS06NS	IC	1	<R>
IC35030,31		AN78L05	IC	2	<R>
IC35041-43		MN74HC574S	IC	3	<R>
IC35044-46		UPD42505C-50	IC	3	<R>
IC35047		UPD65022F046	IC	1	<R>
IC35048		UPD65042F024	IC	1	<R>
IC35049,50		MN74HC574S	IC	2	<R>
IC35051-56		MN74HC161S	IC	6	<R>
IC35057		MN74HC32S	IC	1	<R>
IC35058		MN74HC04S	IC	1	<R>
IC35059		MN74HC08S	IC	1	<R>
IC35060		MN74HC240S	IC	1	<R>
IC35061-67		MN74HC157S	IC	7	<R>
L35001		VLQ0199	COIL	1	
L35002		VLQEL05F101K	COIL 100UH	1	
L35003		VLQEL05F470K	COIL 47UH	1	
L35004		VLP0017	COIL	1	
L35005		VLQEL05F101K	COIL 100UH	1	
L35006		VLP0017	COIL	1	
L35008		VLQEL05F101K	COIL 100UH	1	
L35009		VLQEL05F470K	COIL 47UH	1	
L35010		VLQEL05F181K	COIL 180UH	1	
L35011		VLP0017	COIL	1	
L35012		VLP0054	COIL	1	
L35013		VLP0017	COIL	1	
L35014		VLQEL05F101K	COIL 100UH	1	
L35015		VLP0017	COIL	1	
L35018		VLQEL05F101K	COIL 100UH	1	
L35019		VLP0017	COIL	1	
L35020,21		VLP0054	COIL	2	
L35031		VLP0017	COIL	1	
L35032,33		VLP0054	COIL	2	
P35001		VJP1236T	CONNECTOR(MALE) 9P	1	
P35002		VJP1232T	CONNECTOR(MALE) 5P	1	
P35003		VJP1233T	CONNECTOR(MALE) 6P	1	
Q35001		2SD601	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q35002		2SB709	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q35003,04		2SC2295	TRANSISTOR CHIP	2	(B,C)<R>
Q35005		2SA1022	TRANSISTOR CHIP	1	(B,C)<R>
Q35006-08		2SD601	TRANSISTOR CHIP	3	(Q,R,S)<R>
Q35009		2SC2295	TRANSISTOR CHIP	1	(B,C)<R>
Q35010		2SA1022	TRANSISTOR CHIP	1	(B,C)<R>
Q35011		2SD601	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q35012		2SB709	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q35013-15		2SD601	TRANSISTOR CHIP	3	(Q,R,S)<R>
Q35016		2SC2295	TRANSISTOR CHIP	1	(B,C)<R>
Q35017		2SA1022	TRANSISTOR CHIP	1	(B,C)<R>
Q35018		2SD601	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q35019		2SB709	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q35020,21		2SD601	TRANSISTOR CHIP	2	(Q,R,S)<R>
Q35022		2SB709	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q35023		2SD601	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q35025		2SD601	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q35026		2SB709	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q35027		2SD601	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q35028		2SB709	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q35029		2SK198	TRANSISTOR	1	<R>
Q35030		2SB709	TRANSISTOR CHIP	1	(Q,R,S)<R>
Q35031		2SD601	TRANSISTOR CHIP	1	(Q,R,S)<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R35001		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R35002		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R35003		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R35004		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R35005-07		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	3	
R35008		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R35009		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R35010		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R35011		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R35012		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R35013,14		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R35015,16		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R35017		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R35018		ERJ6GEYG561	M.RESISTOR CH 1/10W 560	1	
R35019		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R35020		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R35021		ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R35022		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R35023		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R35024		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R35025		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R35026		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R35027		ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R35028		ERJ6GEYG333	M.RESISTOR CH 1/10W 33K	1	
R35029		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R35030		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R35031		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R35032		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R35033		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R35034		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R35035		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R35036		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R35037		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R35038		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R35039		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R35040		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R35041		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R35042		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R35043		ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R35044		ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1	
R35045		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R35046		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R35047		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R35050		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R35051		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R35052,53		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R35054		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R35055		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R35056		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R35057		ERJ6GEYG123	M.RESISTOR CH 1/10W 12K	1	
R35058		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R35060		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R35061		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R35062		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R35063		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R35065		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R35066		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R35067		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R35068		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R35069		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R35071		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R35072		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R35073		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R35074,75		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R35076,77		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	2	
R35078		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R35079		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R35080		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R35081,82		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R35083		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R35084,85		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R35086		ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R35087		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R35088,89		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R35090		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R35091		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R35092		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R35093		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R35094		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R35095		ERJ6GEYG431	M.RESISTOR CH 1/10W 430	1	
R35096-98		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	3	
R35099		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R35100		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R35101		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R35102		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R35103		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R35104		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R35105,06		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R35107		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R35108		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R35109		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R35110		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R35111,12		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	2	
R35114		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R35115		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R35116		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R35117		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R35118		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R35119		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R35124		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R35151-54		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	4	
VR35001,02		EVN38CA00B13	V.RESISTOR 1K	2	
VR35003		EVN38CA00B53	V.RESISTOR 5K	1	
VR35004,05		EVM38GA00B23	V.RESISTOR 2K	2	
X35001		VSX0297	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
E79		VSC2768	SHIELD CASE (BOTTOM)	1	
E80		VSC2769	SHILED CASE (MAIN)	1	
E81		VSC2770	SHILED CASE (TOP)	1	
	■	VEP06540A	FRONT C.B.A.		INCLUDING THE DISPLAY C.B.A. (VEP00M82A)
C6201		ECCF1H100DC	C.CAPACITOR 50V 10P	1	
C6202		ECCF1H330JC	C.CAPACITOR 50V 33P	1	
C6203		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C6204		ECCF1H330JC	C.CAPACITOR 50V 33P	1	
C6205		ECCF1H080DC	C.CAPACITOR 50V 8P	1	
C6206		ECEA1HKR22	E.CAPACITOR 50V 0.22U	1	
C6207		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C6208		ECEA1AK330	E.CAPACITOR 10V 33U	1	
C6209		ECKF1H1032F	C.CAPACITOR 50V 0.01U	1	
C6210		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C6211		ECEA1HK220	E.CAPACITOR 50V 22U	1	
C6212		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
D6201-09		MA165	DIODE	9	<R>
D6210		MA4075	DIODE	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
DP6741		VSL0170	DISPLAY TUBE	1	<R>
IC6201		MN15283VM0	IC	1	<R>
IC6202		MN1220	IC	1	<R>
IC6203		MN1280L	IC	1	<R>
IC6204		MN1280R	IC	1	<R>
L6201		VLQEL05F101K	COIL 100UH	1	
P6201		VJP1879T	CONNECTOR(MALE) 8P	1	
P6202		VJP1876T	CONNECTOR(MALE) 5P	1	
P6203		VJP1245T	CONNECTOR(MALE) 5P	1	
P6204		VJP1875T	CONNECTOR(MALE) 4P	1	
P6205		VJS1496	CONNECTOR(FEMALE) 19P	1	
P6206		VJP1244T	CONNECTOR(MALE) 4P	1	
P6207-09		VJP1877T	CONNECTOR(MALE) 6P	3	
P6210		VJP1248T	CONNECTOR(MALE) 8P	1	
P6211		VJP1250T	CONNECTOR(MALE) 10P	1	
P6212		VJP1878	CONNECTOR(MALE) 7P	1	
P6741,42		VJP1251T	CONNECTOR(MALE) 11P	2	
Q6201-04		2SB641	TRANSISTOR	4	(Q,R)<R>
Q6205-09		2SD636	TRANSISTOR	5	(Q,R)<R>
Q6211		2SD636	TRANSISTOR	1	(Q,R)<R>
QR6201		UN1112	TRANSISTOR-RESISTOR	1	<R>
QR6202-07		UN1214	TRANSISTOR-RESISTOR	6	<R>
R6201-04		ERDS2TJ104	C.RESISTOR 1/4W 100K	4	
R6205-08		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	4	
R6209		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R6210		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R6211		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R6212-15		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	4	
R6216		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6217		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R6218		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R6222		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R6223		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R6224		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6225		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R6226		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R6227		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6228		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R6229		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6230		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R6233		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
RA6201		EXBP86123K	COMBI R-R	1	
RA6202		EXBF9E473J	COMBI R-R	1	
RA6203		EXBP85473K	COMBI R-R	1	
SW6201		VSS0216	SWITCH	1	<R>
SW6202		VSS0217	SWITCH	1	<R>
SW6203-05		VSS0216	SWITCH	3	<R>
SW6206		VSS0218	SWITCH	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
X6201		VSX0094	CRYSTAL OSCILLATOR	1	<R>
X6202		VSX0140	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
E82		VJF0398	DISPLAY TUBE HOLDER	1	
E83		VMP2066	ANGLE	2	
E84		VHN0040	RIVET	2	
	■	VEP06541A	FRONT JACK C.B.A.		
C6501		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C6502,03		ECEA1CKS100	E.CAPACITOR 16V 10U	2	
C6504-06		ECEA1CK470U	E.CAPACITOR 16V 47U	3	
C6507-10		ECEA1CKS100	E.CAPACITOR 16V 10U	4	
C6511-14		ECEA1CK470U	E.CAPACITOR 16V 47U	4	
C6515-17		ECEA1CKS100	E.CAPACITOR 16V 10U	3	
C6518,19		ECEA1CK470U	E.CAPACITOR 16V 47U	2	
C6520,21		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
D6501		MA151K	DIODE	1	<R>
D6502		MA151WA	DIODE	1	<R>
FL6501-04		VLF0523	FILTER	4	
IC6501		NJM2068DD	IC	1	<R>
IC6502		UPC4556C	IC	1	<R>
IC6503		UPD4066BC	IC	1	<R>
J6501,02		VJJ0084	MIC JACK	2	<R>
J6503		VJJ0094	HEAD PHONE JACK	1	<R>
L6501		VLQEL05F102K	COIL 1000UH	1	
P6501		VJP1246T	CONNECTOR(MALE) 6P	1	
P6502		VJP1249T	CONNECTOR(MALE) 9P	1	
P6503		VJP1243T	CONNECTOR(MALE) 3P	1	
P6504		VJP1244T	CONNECTOR(MALE) 4P	1	
Q6501,02		2SD601	TRANSISTOR CHIP	2	(Q,R)<R>
Q6503,04		2SD1328	TRANSISTOR CHIP	2	(Q,R)<R>
QR6501		UN2213	TRANSISTOR-RESISTOR	1	<R>
R6501,02		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R6503,04		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R6505		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R6506		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6507		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R6508		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R6509		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R6510		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R6511-14		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	4	
R6515,16		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	2	
R6517		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R6518		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R6519		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R6520		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R6521		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R6522		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R6523		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R6524		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6525		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R6526		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R6527		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R6528		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6529		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R6530,31		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R6532		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R6533		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6534,35		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R6536,37		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	2	
R6538		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6539		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R6540		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
VR6501		EWKH1AY15B14	V.RESISTOR 10K	1	
VR6502,03		EWHH1AY15B15	V.RESISTOR 100K	2	
VR6504		EWHH1AP15B53	V.RESISTOR 5K	1	
			MISCELLANEOUS		
E85		VMP2072	JACK PANEL	1	
	■	VEP06546A	KEY BOARD C.B.A.		
D6251-60		MA165	DIODE	10	<R>
D6261-70		LN840RCP	DIODE	10	<R>
D6271,72		LN340GCPGLS	DIODE	2	<R>
R6251		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R6252		ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R6253		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R6254		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
SW6251-60		EVQQJ104K	SWITCH	10	<R>
			MISCELLANEOUS		
E86		VEE5191	FLAT CABLE 10P	1	<R>
E87		VEE5192	FLAT CABLE 8P	1	<R>
	■	VEP06542A	REAR JACK (A) C.B.A.		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C6401		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C6402		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C6403,04		ECKF1H102ZF	C.CAPACITOR 50V 1000P	2	
C6405		ECKF1H272KB	C.CAPACITOR 50V 2700P	1	
C6406		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6407		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C6408		ECEA1HK010	E.CAPACITOR 50V 1U	1	
D6401-06		MA165	DIODE	6	<R>
IC6401		UPC339C	IC	1	<R>
L6401		VLQEL05F221K	COIL 220UH	1	
P6401,02		VJP1243T	CONNECTOR(MALE) 3P	2	
P6403		VJP1248T	CONNECTOR(MALE) 8P	1	
P6404		VJP1247T	CONNECTOR(MALE) 7P	1	
P6405		VJP1244T	CONNECTOR(MALE) 4P	1	
P6406		VJP1243T	CONNECTOR(MALE) 3P	1	
R6401		ERDS2TJ750	C.RESISTOR 1/4W 75	1	
R6402		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R6403		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R6404		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R6405		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6406,07		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R6408		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R6409,10		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R6411,12		ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R6414		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R6415		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R6416		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R6417		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R6418,19		ERDS2TJ750	C.RESISTOR 1/4W 75	2	
	■	VEP06543A	REAR JACK (B) C.B.A.		
C6451-53		ECEA1CK470U	E.CAPACITOR 16V 47U	3	
P6451,52		VJP1244T	CONNECTOR(MALE) 4P	2	
P6453		VJP1244R	CONNECTOR(MALE) 4P	1	
P6455		VJP1243T	CONNECTOR(MALE) 3P	1	
Q6451-55		2SD1330	TRANSISTOR	5	(Q,R,S)<R>
R6451		EROS2CKG5600	M.RESISTOR 1/4W 560	1	
R6452		EROS2CKG4301	M.RESISTOR 1/4W 4.3K	1	
R6453		EROS2CKG5600	M.RESISTOR 1/4W 560	1	
R6454		EROS2CKG4301	M.RESISTOR 1/4W 4.3K	1	
R6455,56		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R6457		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R6458		EROS2CKG5600	M.RESISTOR 1/4W 560	1	
R6459		EROS2CKG4301	M.RESISTOR 1/4W 4.3K	1	
R6460		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6461		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R6462		EROS2CKG5600	M.RESISTOR 1/4W 560	1	
R6463		EROS2CKG4301	M.RESISTOR 1/4W 4.3K	1	
R6464		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6465		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R6466		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6467		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R6468		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
	■	VEP02351A	CAP BACK UP C.B.A.		INCLUDING THE SUB CAP BACK UP (VEP00P51A)
C6771,72		ECEB1EU332	E.CAPACITOR 25V 3300U	2	
C6773-75		EECW2R3A4R7	E.CAPACITOR 2.3V 4.7	3	
C6776,77		ECEA0JU331	E.CAPACITOR 6.3V 330U	2	
D6771		FMB-G14L	DIODE	1	<R>
D6772		MA165	DIODE	1	<R>
D6773		FMB-G14L	DIODE	1	<R>
D6774		MA165TA5VT	DIODE	1	<R>
P6771		VJP1234T	CONNECTOR(MALE) 7P	1	
Q6771-75		2SD636	TRANSISTOR	5	(Q,R)<R>
Q6776		2SB641	TRANSISTOR	1	(Q,R)<R>
QR6771-73		UN1213	TRANSISTOR-RESISTOR	3	<R>
R6771-73		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	3	
R6774		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R6775		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R6776		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6777		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R6778,79		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R6780		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R6781		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R6782		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R6783		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6784		ERG1SJ330	M.RESISTOR 1W 33	1	
R6785		ERG2SG221	M.RESISTOR 2W 220	1	
R6788-90		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
			MISCELLANEOUS		
E88		VMP2324	ANGLE	1	
	■	VEP00N71A	FLYING ERASE C.B.A.		
C6931		ECCF1H270JC	C.CAPACITOR 50V 27P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C6932		ECCF1H220JC	C.CAPACITOR 50V 22P	1	
C6933,34		ECKF1H102KB	C.CAPACITOR 50V 1000P	2	
C6935-39		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	5	
C6940		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C6941		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6942		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
IC6931		MN4040BS	IC	1	<R>
IC6932,33		MC14068BF	IC	2	<R>
IC6934,35		MN4013BS	IC	2	<R>
IC6936		MN4001BS	IC	1	<R>
IC6937		MN4069UBS	IC	1	<R>
P6931		VJP1235T	CONNECTOR(MALE) 8P	1	
Q6931-35		2SD636	TRANSISTOR	5	(Q,R,S)<R>
R6931		ERC14GJ106	S.RESISTOR 1/4W 10M	1	
R6932		ERDS2TJ184	C.RESISTOR 1/4W 180K	1	
R6933,34		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R6935,36		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R6937		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R6938-40		ERDS2TJ473	C.RESISTOR 1/4W 47K	3	
R6941		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
X6931		VSX0094	CRYSTAL OSCILLATOR	1	<R>
	■	VEP00N84A	TEST POINT C.B.A.		
P1		VJP1231T	CONNECTOR(MALE) 4P	1	
P2		VJP1229T	CONNECTOR(MALE) 2P	1	
P3		VJP1231T	CONNECTOR(MALE) 4P	1	
P4		VJP1230T	CONNECTOR(MALE) 3P	1	
			MISCELLANEOUS		
E89		VMP2164	ANGLE	1	
	■	VEP00M63A	POCKET SW C.B.A.		
D2201-13		MA165	DIODE	13	<R>
R2201		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
SW2201		VSS0126	SWITCH	1	<R>
SW2202		VSS0170	SWITCH	1	<R>
SW2203		VSS0126	SWITCH	1	<R>
SW2204		VSS0127	SWITCH	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
SW2205		VSS0170	SWITCH	1	<R>
SW2206,07		VSS0127	SWITCH	2	<R>
SW2208,09		VSS0126	SWITCH	2	<R>
SW2210-16		EVQQFQ02K	SWITCH	7	<R>
			MISCELLANEOUS		
E90		VWJ0379	FLEXIBLE WIRE	1	<R>
	■	VEP00M90A	POCKET SW CONNECTION C.B.A.		
P6351		VJP1231T	CONNECTOR(MALE) 4P	1	
P6352		VJS2149	CONNECTOR(FEMALE) 4P	1	
	■	VEP00M61A	METER VOLUME C.B.A.		
D4501-04		MA165	DIODE	4	<R>
D4505-14		LN440YCPUVT	DIODE	10	<R>
P4501		VJP1879T	CONNECTOR(MALE) 8P	1	
P4502,03		VJP1876T	CONNECTOR(MALE) 5P	2	
R4501,02		ERDS2TJ331	C.RESISTOR 1/4W 330	2	
R4503		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R4504		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R4505		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R4506		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R4507		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R4508		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R4509		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R4510		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R4511,12		ERDS2TJ471	C.RESISTOR 1/4W 470	2	
SW4501		VSS0216	SWITCH	1	<R>
VR4501-04		EVJ2KAP20B14	V.RESISTOR 10K	4	
			MISCELLANEOUS		
E91		VMP2067	VOLUME HOLDER	1	
E92		VGF0185	LED REFLECTOR	2	
	■	VEP00M62A	EJECT SW C.B.A.		
D6721		MA165	DIODE	1	<R>
D6722,23		LN340GCPGLS	DIODE	2	<R>

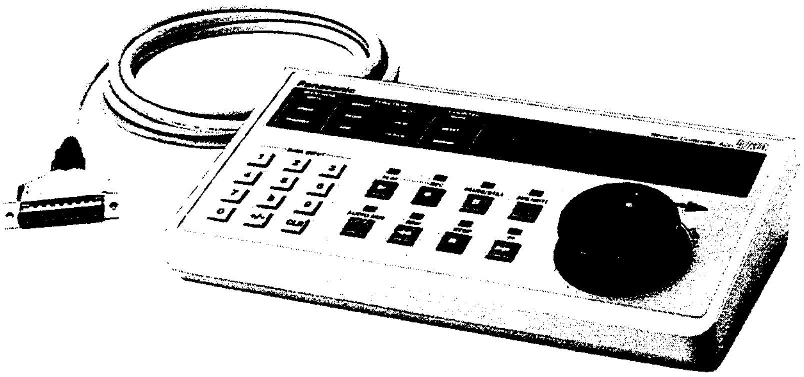
Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6721,22		ERDS2TJ101	C.RESISTOR 1/4W 100	2	
SW6721		EVQQJ104K	SWITCH	1	<R>
			MISCELLANEOUS		
E93		VGF0240	LED HOLDER	1	
	■	VEP00M64A	SEARCH LED C.B.A.		
D6301		LN81RCPHL	LED	1	<R>
D6305,06		LN31GCPHLG3	DIODE	2	<R>
R6301		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
	■	VEP00N47A	SEARCH DIAL C.B.A.		
			MISCELLANEOUS		
E94		VSQ0651	JOG/SHUTLE DIAL	1	<R>
	■	VEP00M60A	S-VIDEO INPUT C.B.A.		
J6701		VJS2579	4P JACK	1	<R>
P6701		VJP1224	CONNECTOR(FEMALE) 4P	1	
R6701,02		ERDS2TJ750	C.RESISTOR 1/4W 75	2	
	■	VEP00M66A	S-VIDEO OUTPUT C.B.A.		
J6711		VJS2579	4P JACK	1	<R>
P6711		VJP1244T	CONNECTOR(MALE) 4P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP00M83A	SYNC EDIT CONNECTION C.B.A.		
J6751		VJJ0169	MINI STEREO JACK	1	
P6751		VJP1874T	CONNECTOR(MALE) 3P	1	
	■	VEP00K88A	FE HEAD C.B.A.		
C1401		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C1042		ECQB1H472J	P.CAPACITOR 50V 4700U	1	
C1403		ECQB1H333K	P.CAPACITOR 50V 33U	1	
CR1401		EXED103Z333T	COMBI C-R	1	
P1502		VJP1148	CONNECTOR(MALE) 2P	1	
Q1401		2SD636	TRANSISTOR	1	(R)<R>
T1401		EIQ7QF002B	COIL	1	
		VEP00N57A			
C20001		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C20002		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C20003		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C20004		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C20005		ECEA1CK470U	E.CAPACITOR 16V 47U	1	
IC20001		UPC358G	IC	1	<R>
P20001		VJP1932T	CONNECTOR(MALE)	1	
P20002		VJS1685	CONNECTOR(FEMALE)	1	
P20003		VJP1511T	CONNECTOR(MALE)	1	
P20004,05		VJP1229T	CONNECTOR(MALE) 2P	2	
P20006		VJP1232T	CONNECTOR(MALE) 5P	1	
P20007		VJP1229T	CONNECTOR(MALE) 2P	1	
R20001		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R20002		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R20003		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R20004		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R20005		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R20006		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R20007-10		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	4	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEK2657	TENSION SENSOR UNIT		
Q1504		ON1301	PHOTO INTERRUPTOR	1	<R>
R1502		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
	■	VEK4265	REV TENSION SENSOR UNIT		
			MISCELLANEOUS		
E95		VMA7987	REV PHOTO HOLDER	1	
E96		ON1108	PHOTO INTERRUPTOR	1	
	■	VEK3578	PHOTO TR. (L) UNIT		
C1501		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
Q1501		PN150NVS	PHOTO TR.	1	<R>
			MISCELLANEOUS		
E97		VMP0645	PHOTO TR. HOLDER	1	
	■	VEK4058	PHOTO TR. (R) UNIT		
C1502		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
P1508		VJS2165W	CONNECTOR(FEMALE) 6P	1	
Q1502		PN150NVS	PHOTO TR.	1	<R>
R1503		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
			MISCELLANEOUS		
E98		VMP0645	PHOTO TR. HOLDER	1	

Remote Controller

AG-A730-E



SPECIFICATIONS

ITEM	SPECIFICATION
Power	Source: DC 5 V±0.5 V DC 12 V±1 V Consumption: Approx. 0.5 W
Data Format	Stop Bit: 1 Bit/2 Bit Parity: NONE/ODD/EVEN Speed: 600/1200/2400/4800 BPS Bit Length: 7 Bit/8 Bit
Control Key	Operating Key: PLAY, STOP, FF, REW, REC, A-DUB, PAUSE/STILL, JOG/SHTL (REV × 10↔STILL↔FWD × 10) Function Key: MODE, RESET, REMAIN, MEMORY, SEARCH-PLAY, SEARCH-PAUSE, REPEAT, BIGIN, END, WRITE, ERASE, RENUMBER Ten Key: 0~9, +/−, CLR
Control Connector	RS-232C Connector
Operating Condition	Temperature: 5 ℃~40 ℃ Humidity: 35%~80%
Dimmsions	250 (W) × 133 (D) × 45 (H) mm
Weight	Approx. 1 kg

Specifications are subject to change without notice.
Weight and dimensions shown are approximate.

CONTENTS

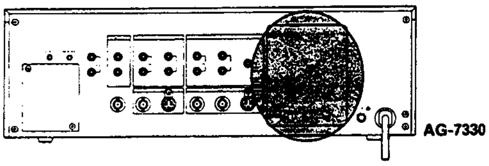
OPERATING INSTRUCTIONS 6-3
CIRCUIT BOARDS 6-6
SCHEMATIC DIAGRAMS 6-9
EXPLODED VIEWS 6-12
REPLACEMENT PARTS LIST 6-14
1. MECHANICAL REPLACEMENT PARTS LIST 6-14
2. ELECTRICAL REPLACEMENT PARTS LIST 6-14

FEATURES

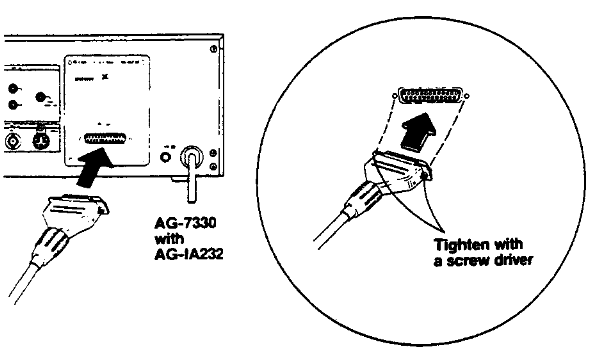
- By adopting the AG-IA232 Interface Adaptor (option), you can operate the AG-7330 and AG-7130 VTRs by RS-232C control capability about 3 meters away from the VTR.
- The unit allows the following VTR function: PLAY, STOP, FF, REW, REC, Audio Dubbing, Pause/Still and JOG/SHTL.
- In addition to normal playback, you can enjoy playback picture at about 1/25, 1/9, 1/5, 1/2, 1, 2, 5, 9 times normal speed in forward and at about 9, 5, 2, 1, 1/2, 1/5, 1/9, 1/25 times normal speed in reverse.

CONNECTING THE REMOTE CONTROLLER

1. First, be sure that the RS-232C Interface Adaptor (AG-IA232, option) is connected to the Remote Control Connector section (at the rear panel) of the VTR AG-7330 or AG-7130.



2. Connect the plug of the remote controller to the Interface Adaptor as shown below.

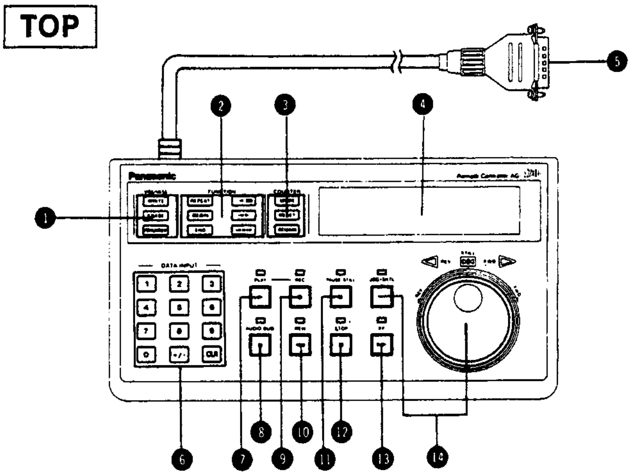


When connecting or disconnecting the plug of the remote controller, be sure to turn the Power Switch on the VTR side "OFF".

Note:
Be sure to set the Operation Selector on the VTR to "REMOTE" side.

CONTROLS AND THEIR FUNCTIONS

TOP



① VISS/VASS Buttons

- **WRITE Button**

Press this button to record the VISS or VASS signals during VISS or VASS mode.

VISS mode:
Press the CLR Button.
Press the WRITE Button at a point that you desire to record the index signals.

VASS mode:
Press the CLR Button.
Use the Data Input Buttons and input the address signals where you want to locate again later. When completed, press the WRITE Button.

Notes:

- Be sure that the VTR is in the following mode.
  During recording:
  REC/PLAY or REC/PAUSE
  During playback:
  PLAY/STILL or PLAY
- WRITE Indicator will flash during recording the VISS or VASS signals, and will go off when completed.
- After setting the VISS or VASS signals during the VTR is in the PAUSE/STILL mode, the mode will be canceled and the VISS/VASS signal recording will start.

- **ERASE Button**

Press this button to delete unnecessary VISS or VASS signals.

1. Press the CLR Button.
2. Use the Data Input Buttons to input the unnecessary VISS or VASS signals.
3. Press the SEARCH PAUSE (→▸I◂) Button and put the VTR in the pause/still mode at the desired signal.
4. Press the ERASE Button. The VTR will go into playback mode and deleting starts.

Note:
The ERASE Indicator will flash during deleting and will go off when completed.

- **RENUMBER Button**

Press this button when desired to change index and address signals to address signals with serial numbers.

1. Press the CLR Button.
2. Locate the VTR in still or search still mode at the position where you want to start the renumbering function.
3. Input the desired starting number.
4. Press the RENUMBER Button. The tape will automatically be fast-forwarded and the signals will be changed to address signals.

Note:
The RENUMBER Indicator will light up during renumbering and the WRITE Indicator will flash during recording the signals.

② Function Buttons

- **REPEAT Button**

Press this button when desired to perform the repeat function.
The modes will change as shown below, each time the button is pressed.

OFF – STOP (■⊃) – AUTO (⊂⊃)

Notes:

- This function is available in COUNT or VASS mode.
- The period for the repeat function can be set by BEGIN and END Buttons.

- **BEGIN Button**

Press this button to confirm for the repeat function or setting the beginning data during COUNT or VASS mode. You can confirm the preset beginning data by pressing this button once. The indication will change to COUNT or VASS mode by pressing the button again.

- To set the beginning point:

1. Press the CLR Button.
2. Input the beginning point or the desired beginning address signal using the Data Input Buttons.
3. Press the BEGIN Button.

- **END Button**

Press this button to confirm or setting the ending data for the repeat function during COUNT or VASS mode.
Operating is the same as the BEGIN Button.

- **MEMORY STOP Button**

Press this button to select ON or OFF of the memory stop mode near 0:00:00 during COUNT mode.
The Memory Stop (→000) Indicator will light up during ON mode.

- **SEARCH PLAY [→▶] Button**

The VTR will go into search standby mode following the steps below.

1. Press the CLR Button.
2. Input the data or the signal you want to locate with the Data Input Buttons.
3. Press this button. The Search Play (→▶) Indicator will light up.

Notes:

- The VTR will start the search function by pressing the FF or REW Button. And the VTR will go into play mode when preset data or signal is reached.
- To cancel the search standby mode, press the CLR Button again. The Search Play (→▶) Indicator will go off.

- **SEARCH PAUSE [→▶I◀] Button**

The VTR will go into search standby mode following the steps below.

1. Press the CLR Button.
2. Input the data or the signal you want to locate with the Data Input Buttons.
3. Press this button. The Search Pause (→▶I◀) Indicator will light up.

Notes:

- The VTR will start the search function by pressing the FF or REW Button. And the VTR will go into pause mode when preset data or signal is reached.
- To cancel the search standby mode, press the CLR Button again. The Search Pause (→▶I◀) Indicator will go off.

③ Counter Buttons

- **MODE Button**

Press this button to change the modes. Each time this button is pressed, the mode indicator in the tape counter will change as shown below.

COUNT – VISS – VASS┐

- **RESET Button**

Press this button to reset the reading on the tape counter to "0:00:00".

- **REMAIN Button**

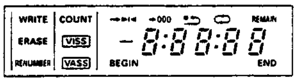
Press this button to indicate the length of the segment remaining on the tape.
The REMAIN Indicator in the tape counter will light up.

Notes:

- When the tape is exchanged, this button will function only during playback mode.

- "Γ" will indicate in the tape counter during calculation.
- No other function buttons are operative during remain mode.
- The indicator will change to COUNT, VISS or VASS mode by pressing the REMAIN Button again.

④ Tape Counter



WRITE:
Indicates the recording of the VISS or VASS signals.

ERASE:
Indicates the deleting of the VISS or VASS signals.

RENUMBER:
Indicates the renumbering function.

COUNT:
Indicates the linear counter mode. When tape travel starts, the counter will provide an indication of the tape travel in Hours: Minutes: Seconds. When the tape goes past the "0:00:00" point and starts to be rewound, the indication on the tape counter will be prefixed by a minus (–) sign.

VISS:
Indicates the 2 digit display VISS mode.

VASS:
Indicates the 4 digit display VASS mode.

→▶:
Indicates the search play mode.

→▶I◀:
Indicates the search pause mode.

→000:
Indicates the counter (0:00:00) stop mode.

↩:
Indicates the one-time repeated playback mode.

⟲:
Indicates the continuous repeated playback mode.

REMAIN:
Indicates remaining tape time.

BEGIN:
Indicates the beginning point or the address signal.

END:
Indicates the ending point or the address signal.

⑤ 25P Remote Control Cable Plug

Connect this plug to the AG-IA232 Interface Adaptor connected to the rear of the VTR.

⑥ DATA INPUT Buttons

- **CLR Button**

Press this button to set the unit in data input mode.
When this button is pressed again during input mode, the unit will go into normal mode and the input data will be cleared.

- **0~9, +/– Button**

After setting the unit into input mode by the CLR Button, use the 0~9 Buttons to input the figure data and +/– Button to switch the "+" and "–".

⑦ Play Button/Lamp

Press this button to playback the recorded tape.

⑧ Audio Dubbing Button/Lamp

Press this button and Play Button simultaneously to start audio dubbing.

⑨ Record Button/Lamp

Press this button and Play Button simultaneously to start recording.

⑩ Rewind Button/Lamp

Press this button to rewind the tape. (No playback picture can be seen.)

⑪ Pause/Still Button/Lamp

During playback (any playback mode included), press this button and still picture will appear. During recording, press this button to pause the tape movement. Press this button once more to release from Pause/Still mode.

⑫ Stop Button/Lamp

Press this button to stop the tape movement. (Tape is moved away from the cylinder head.)

⑬ Fast Forward Button/Lamp

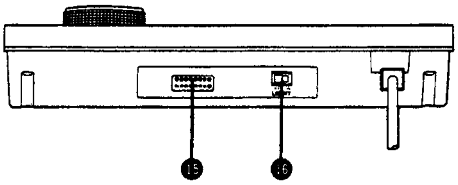
Press this button to fast forward the tape. (No playback picture can be seen.)

⑭ JOG/SHTL Button/Dial/Lamp

Press this button, and then use the dial to find the desired tape position.

Note:
JOG is available only when the SHTL dial is fixed in the centre position.

REAR



⑮ Dip Switch

The Dip Switches 2~7 under RS-232C Interface are as shown below. (Dip Switches 1 and 8 are not used.)

- Stop Bit

	SW2
1 Bit	ON
2 Bit	OFF

- Parity

	SW3	SW4
NONE	ON	ON
ODD	OFF	ON
NONE	ON	OFF
EVEN	OFF	OFF

- Bit Length

	SW5
7 Bit	ON
8 Bit	OFF

- Baud Rate

	SW6	SW7
4800	ON	ON
2400	OFF	ON
1200	ON	OFF
600	OFF	OFF

Notes:

- Be sure that the settings are the same with the Dip Switches of the AG-IA232 Interface Adaptor on the VTR.
- When the remote controller is connected to the VTR, the operating buttons, mode selection, dial function, etc. can be remote controlled.

⑯ Light Switch

The tape counter will light up by setting the switch to "ON".

HOW TO USE

After connecting the unit to the VTR with the Operation Selector set to "REMOTE" (VTR side), the operating buttons on the VTR will be inoperative and the VTR will be controlled by the remote controller.
The EJECT Button on the VTR will function, however.

- **MODE, RESET, REMAIN and REPEAT Buttons are not operative in the following modes.**
  1. Data input mode.
  2. Recording or deleting VISS or VASS signals.
  3. Search standby mode.
  4. When the tape counter is displaying the BEGIN or END data.
  5. When the tape counter is displaying the tape remaining.

- **BEGIN and END Buttons are not operative in the following modes.**
  1. Search standby mode.
  2. Recording or deleting VISS or VASS signals.
  3. When the tape counter is displaying the tape remaining.

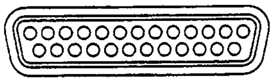
- **To Input the Figures**

COUNT mode (Initial Value 0:00:00)
Input the figures in order of hour, minutes, seconds.
The inputting figure will flash and the flashing will shift to the right when completed. When the flashing reaches to the last, it will go back and flash the hour value again.
Note: The tens digit of minutes and seconds will not accept figures 6, 7, 8 and 9.

VISS signals (Initial Value 01)
VISS signals can be set from 01 to 99. Input from the unit's place which is flashing. For example, when inputting "25", press 2 Button then 5 Button of the Data Input Buttons.

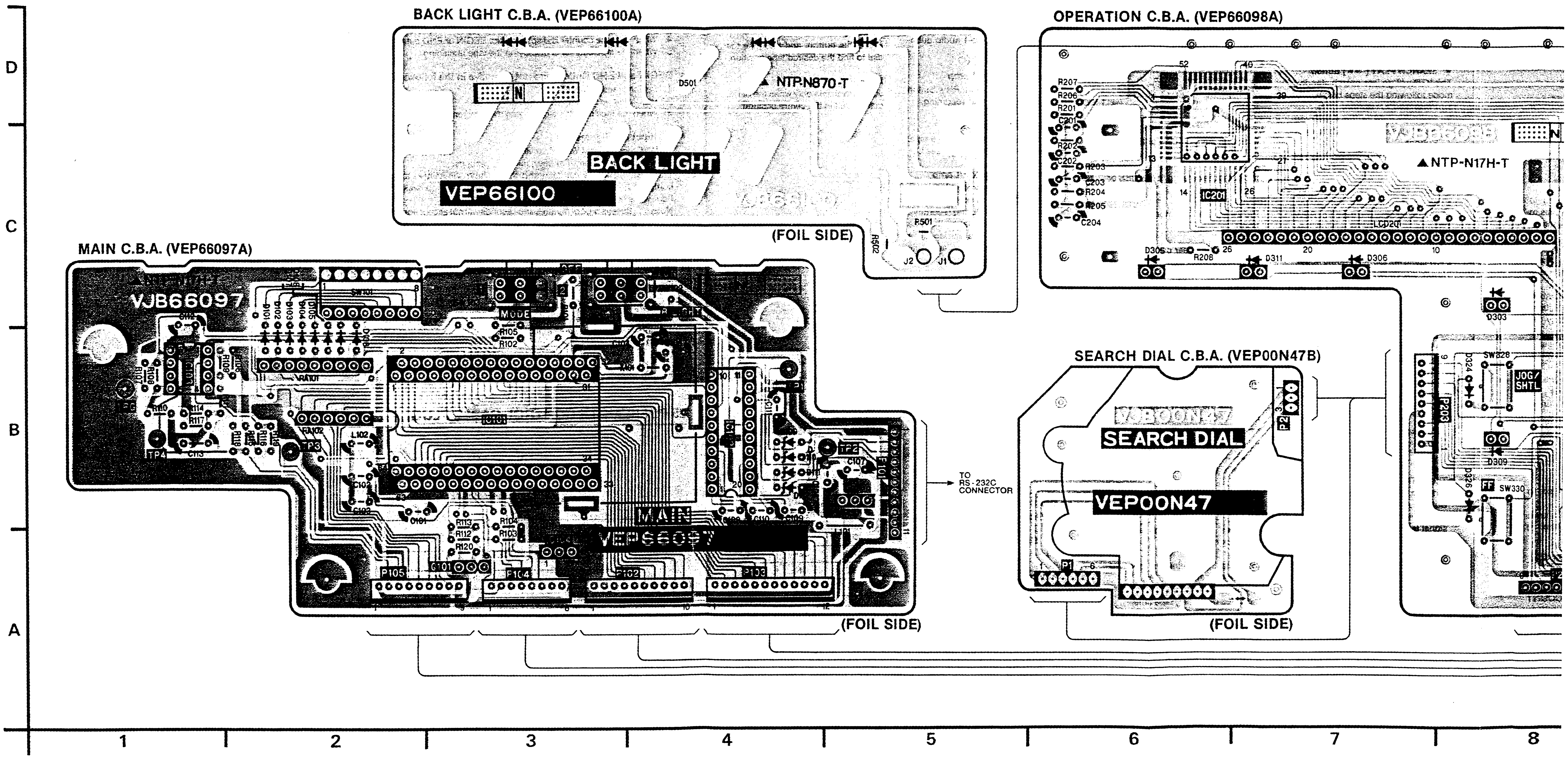
VASS signals (Initial Value 0000)
VASS signals can be set from 0000 to 9999. Input from the unit's place which is flashing. For example, when inputting "1234", press the Data Input Buttons in order of 1, 2, 3, 4.

25 PIN REMOTE CONTROL CABLE PLUG



Pin No.	Contents	Pin No.	Contents
1	GND	7	GND
2	TXD	8	——
3	RXD	9	5 V
4	RTS	10	5 V
5	CTS	11~ 24	——
6	——	25	12 V

MAIN C.B.A. (VEP66097A), OPERATION C.B.A. (VEP66098A), BACK LIGHT C.B.A. (VEP66100A) & SEARCH DIAL C.B.A. (VEP00N47B)


BACK LIGHT C.B.A. (VEP66100A)

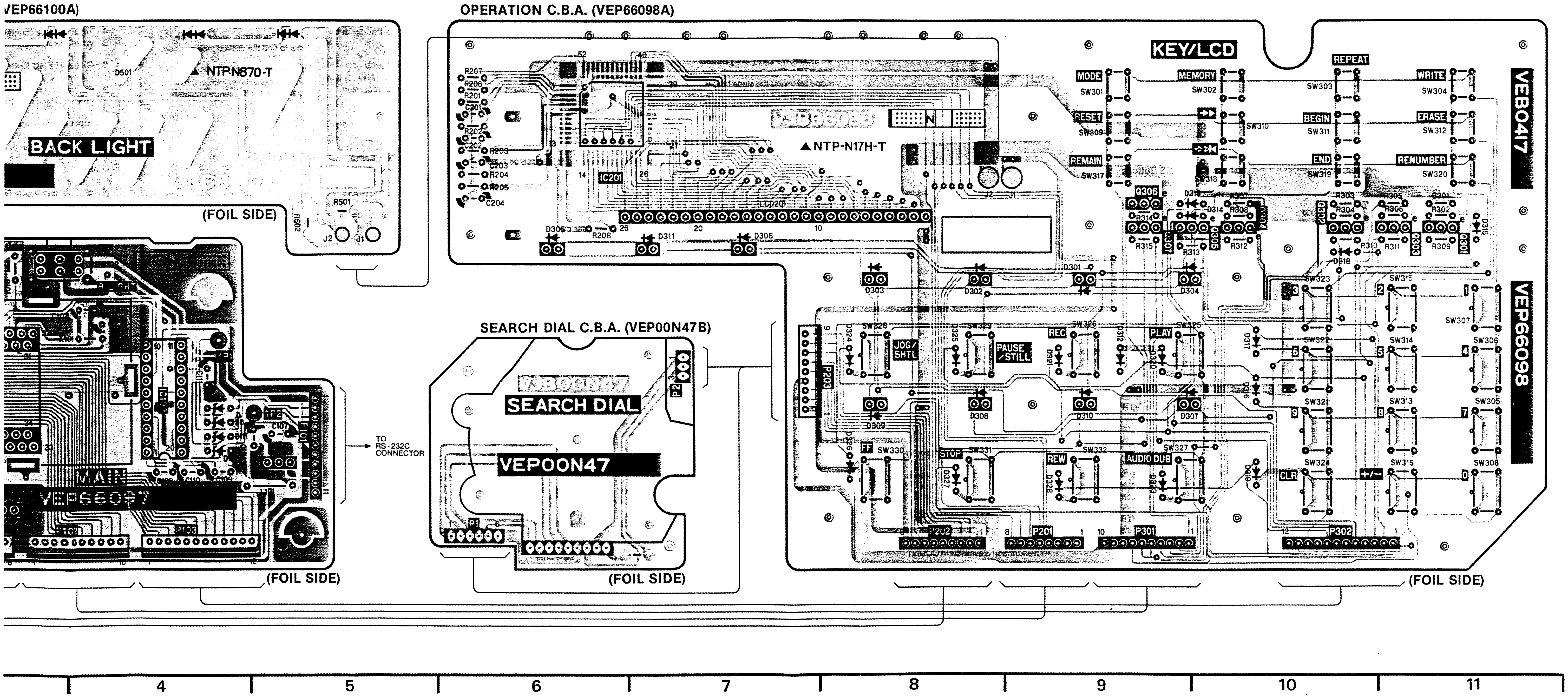
OPERATION C.B.A. (VEP66098A)

MAIN C.B.A. (VEP66097A)

SEARCH DIAL C.B.A. (VEP00N47B)

D
C
B
A
1
2
3
4
5
6
7
8
BACK LIGHT
VEP66100
NTP-N870-T
D501
(FOIL SIDE)
P501
R502
J2
J1
NTP-N17H-T
IC201
LCD201
R207
R206
R201
C201
R202
C202
R203
C203
R204
R205
C204
R208
D305
D311
D306
D303
SW328
JOG/SHTL
P208
D309
SW330
FF
VJB66097
MODE
R105
R102
SW101
RA101
IC101
IC102
TP2
TP3
TP4
C107
C113
R110
R117
L102
C102
C103
Q101
R113
R112
R120
R104
R103
P101
P102
P103
P104
P105
MAIN
VEP66097
TO RS-232C CONNECTOR
(FOIL SIDE)
SEARCH DIAL
VEP00N47
P1
P2
(FOIL SIDE)

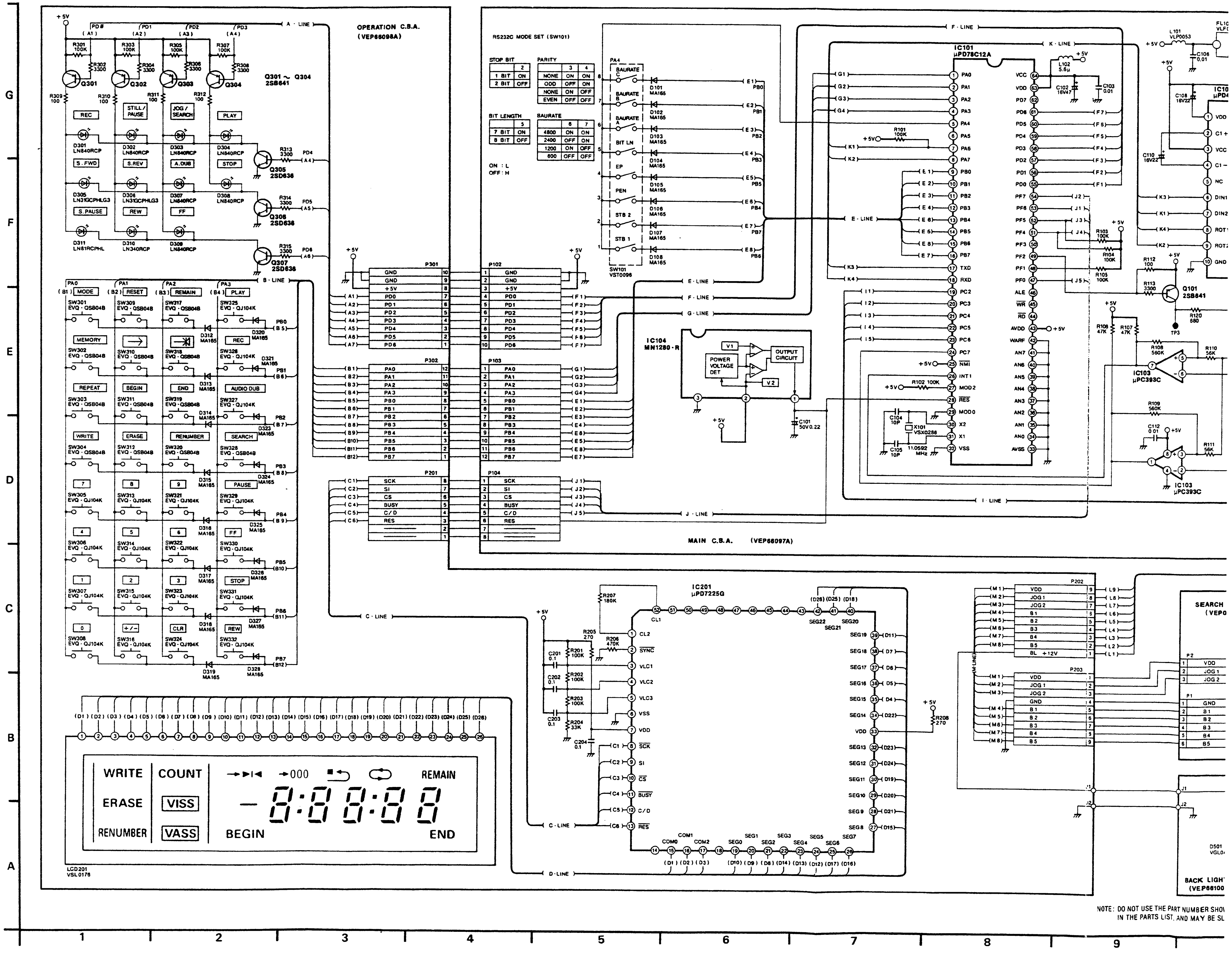
56098A), BACK LIGHT C.B.A. (VEP66100A) & SEARCH DIAL C.B.A. (VEP00N47B)


VEP66100A)
OPERATION C.B.A. (VEP66098A)
SEARCH DIAL C.B.A. (VEP00N47B)
BACK LIGHT
NTP-N870-T
D501
R501
R502
J1
J2
(FOIL SIDE)
MAIN
VEP66097
P102
P103
IC101
TO RS-232C CONNECTOR
SEARCH DIAL
VEP00N47
P1
P2
KEY/LCD
NTP-N17H-T
IC201
LCD201
R201
R202
R203
R204
R205
R206
R207
R208
C201
C202
C203
C204
D301
D302
D303
D304
D305
D306
D307
D308
D309
D310
D311
MODE
SW301
MEMORY
SW302
SW303
REPEAT
WRITE
SW304
RESET
SW309
SW310
BEGIN
SW311
ERASE
SW312
REMAIN
SW317
END
SW319
RENUMBER
SW320
JOG/SHTL
SW326
SW329
PAUSE/STILL
REC
PLAY
SW325
FF
SW330
STOP
SW331
REW
SW332
AUDIO DUB
SW327
SW323
SW322
SW321
SW324
CLR
SW315
SW314
SW313
SW316
+/−
SW307
SW306
SW305
SW308
P201
P202
P203
P301
P302
VEB0417
VEP66098
4
5
6
7
8
9
10
11

MAIN, OPERATION, BACK LIGHT & SEARCH DIAL SCHEMATIC DIAGRAM

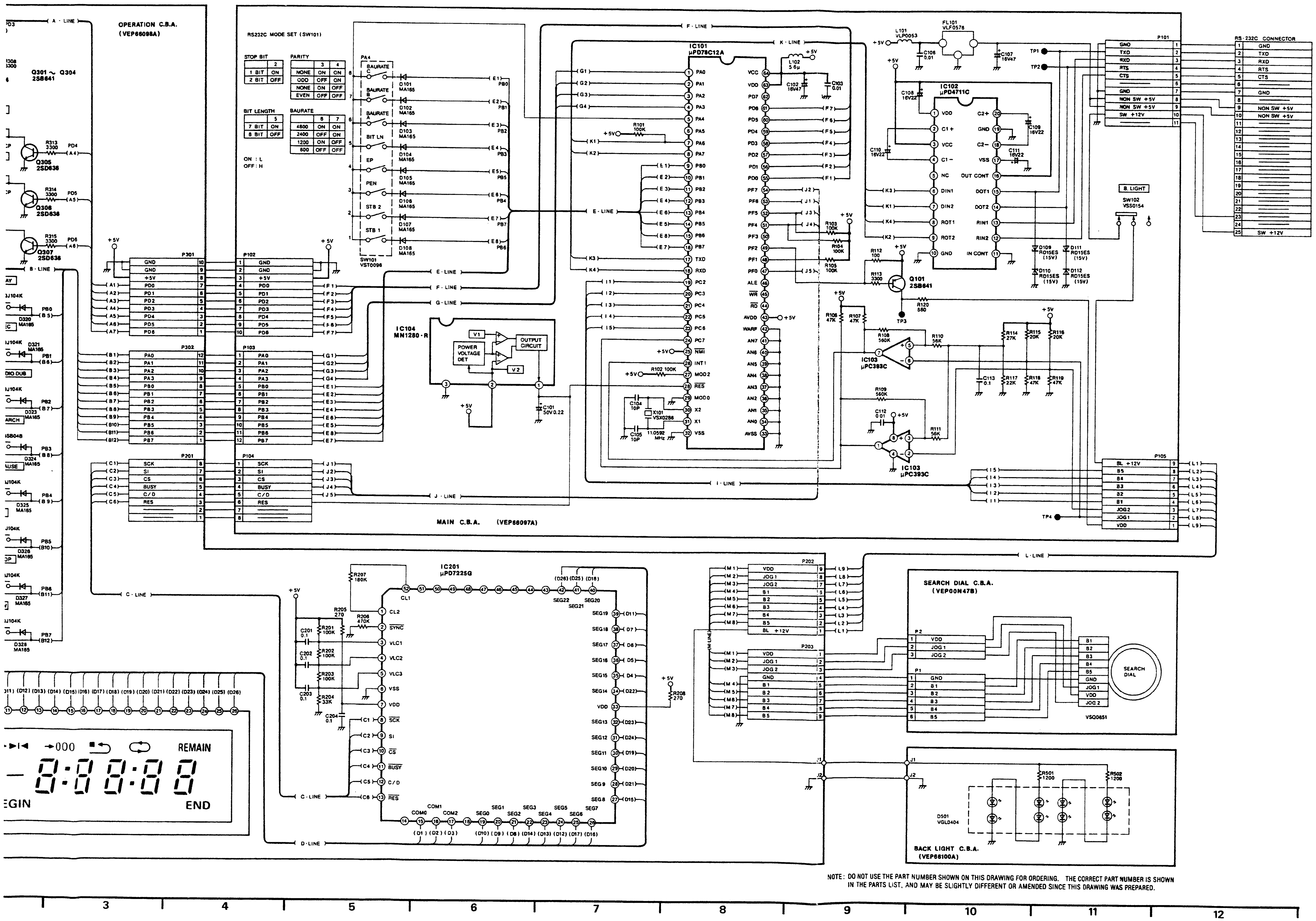
MAIN C.B.A., SEARCH DIAL C.B.A. & OPERATION C.B.A.	
Transistor	
Q101	A-3
Q301	C-11
Q302	C-10
Q303	C-11
Q304	C-10
Q305	C-10
Q306	C-9
Q307	C-9
Integrated Circuit	
IC101	B-3
IC102	B-4
IC103	B-1
IC104	A-3
IC201	C-6
Test Point	
TP101	B-4
TP102	B-4
TP103	B-2
TP104	B-1
TPGND	B-1
Connector	
P1	A-6
P2	B-7
P101	B-5
P102	A-3
P103	A-4
P104	A-3
P105	A-2
P201	A-9
P202	A-8
P203	B-7
P301	A-9
P302	A-10

ADDRESS INFORMATION


OPERATION C.B.A. (VEP68098A)
MAIN C.B.A. (VEP68097A)
SEARCH (VEP
BACK LIGH (VEP68100
IC101 µPD78C12A
IC104 MN1280-R
IC103 µPC393C
IC201 µPD7225G
LCD201 VSL0176
SW101 VST0098
RS232C MODE SET (SW101)
STOP BIT
PARITY
BIT LENGTH
BAUDRATE
ON : L
OFF : H
Q301 ~ Q304 2SB641
Q305 2SD636
Q306 2SD636
Q307 2SD636
Q101 2SB641
X101 VSX0256 11.0592 MHz
REC
STILL/PAUSE
JOG/SEARCH
PLAY
S.FWD
S.REV
A.DUB
STOP
S.PAUSE
REW
FF
MODE
RESET
REMAIN
MEMORY
REPEAT
BEGIN
END
AUDIO DUB
WRITE
ERASE
RENUMBER
SEARCH
PAUSE
CLR
+/-
WRITE
COUNT
REMAIN
ERASE
VISS
RENUMBER
VASS
BEGIN
END
-8:88:88
A - LINE
B - LINE
C - LINE
D - LINE
E - LINE
F - LINE
G - LINE
I - LINE
J - LINE
K - LINE
P301
P302
P201
P102
P103
P104
P202
P203
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9

NOTE: DO NOT USE THE PART NUMBER SHO
IN THE PARTS LIST, AND MAY BE SL

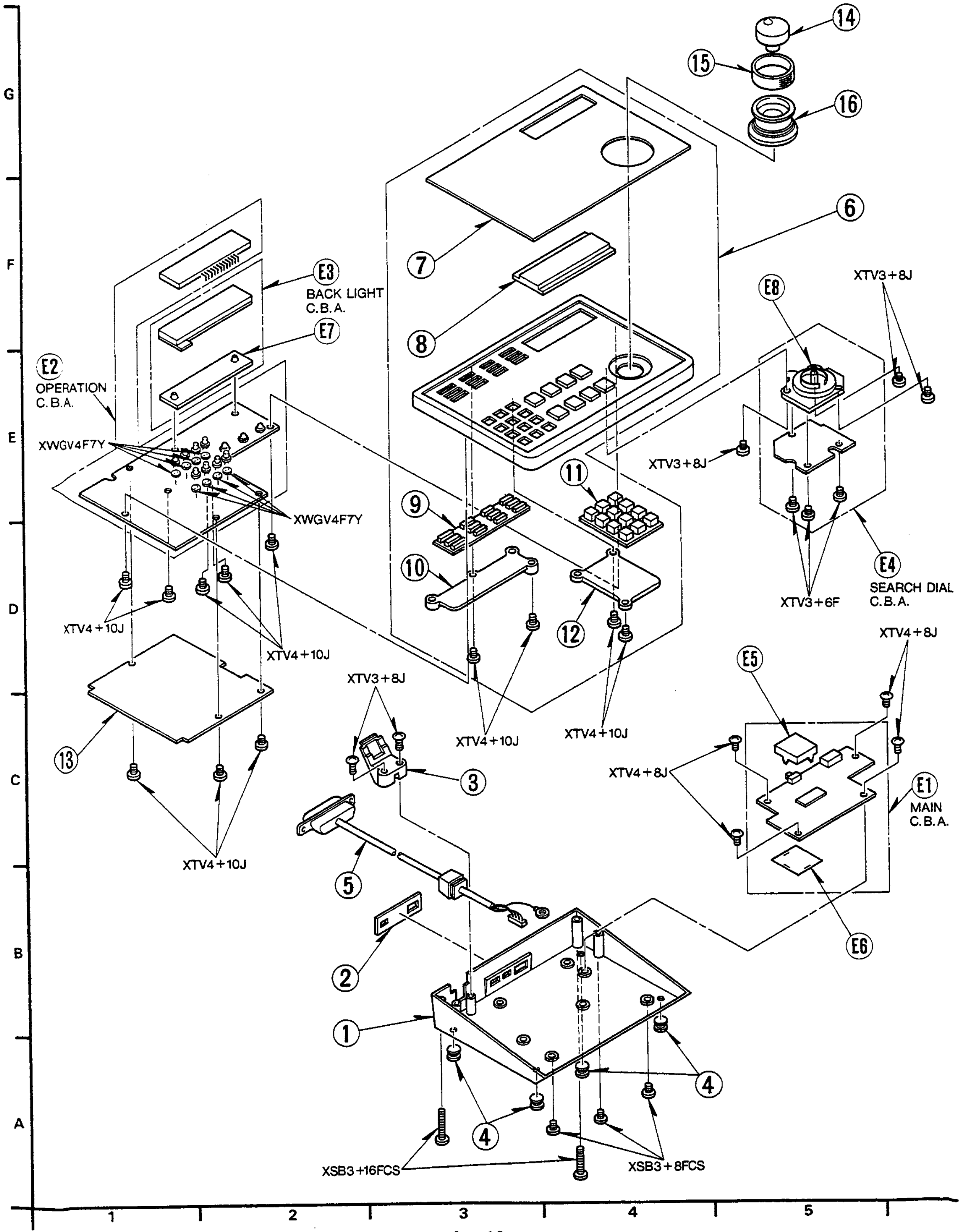
ACK LIGHT & SEARCH DIAL SCHEMATIC DIAGRAM


OPERATION C.B.A.
(VEP66098A)
Q301 ~ Q304
2SB641
Q305
2SD636
Q306
2SD636
Q307
2SD636
A · LINE
B · LINE
C · LINE
D · LINE
E · LINE
F · LINE
G · LINE
I · LINE
J · LINE
K · LINE
L · LINE
RS232C MODE SET (SW101)
STOP BIT
PARITY
BIT LENGTH
BAURATE
ON : L
OFF : H
SW101
VST0096
P301
P302
P201
P102
P103
P104
IC101
µPD78C12A
IC102
µPD4711C
IC103
µPC393C
IC104
MN1280-R
POWER VOLTAGE DET
OUTPUT CIRCUIT
Q101
2SB641
FL101
VLF0576
L101
VLP0053
X101
VSX0288
11.0592 MHz
P101
RS-232C CONNECTOR
GND
TXD
RXD
RTS
CTS
NON SW +5V
SW +12V
TP1
TP2
TP3
TP4
B. LIGHT
SW102
VSS0154
P105
MAIN C.B.A. (VEP66097A)
IC201
µPD7225G
P202
P203
SEARCH DIAL C.B.A.
(VEP00N47B)
SEARCH DIAL
VSQ0651
BACK LIGHT C.B.A.
(VEP66100A)
D501
VGL0404
R501 1200
R502 1200
REMAIN
→000
EGIN
END
3
4
5
6
7
8
9
10
11
12

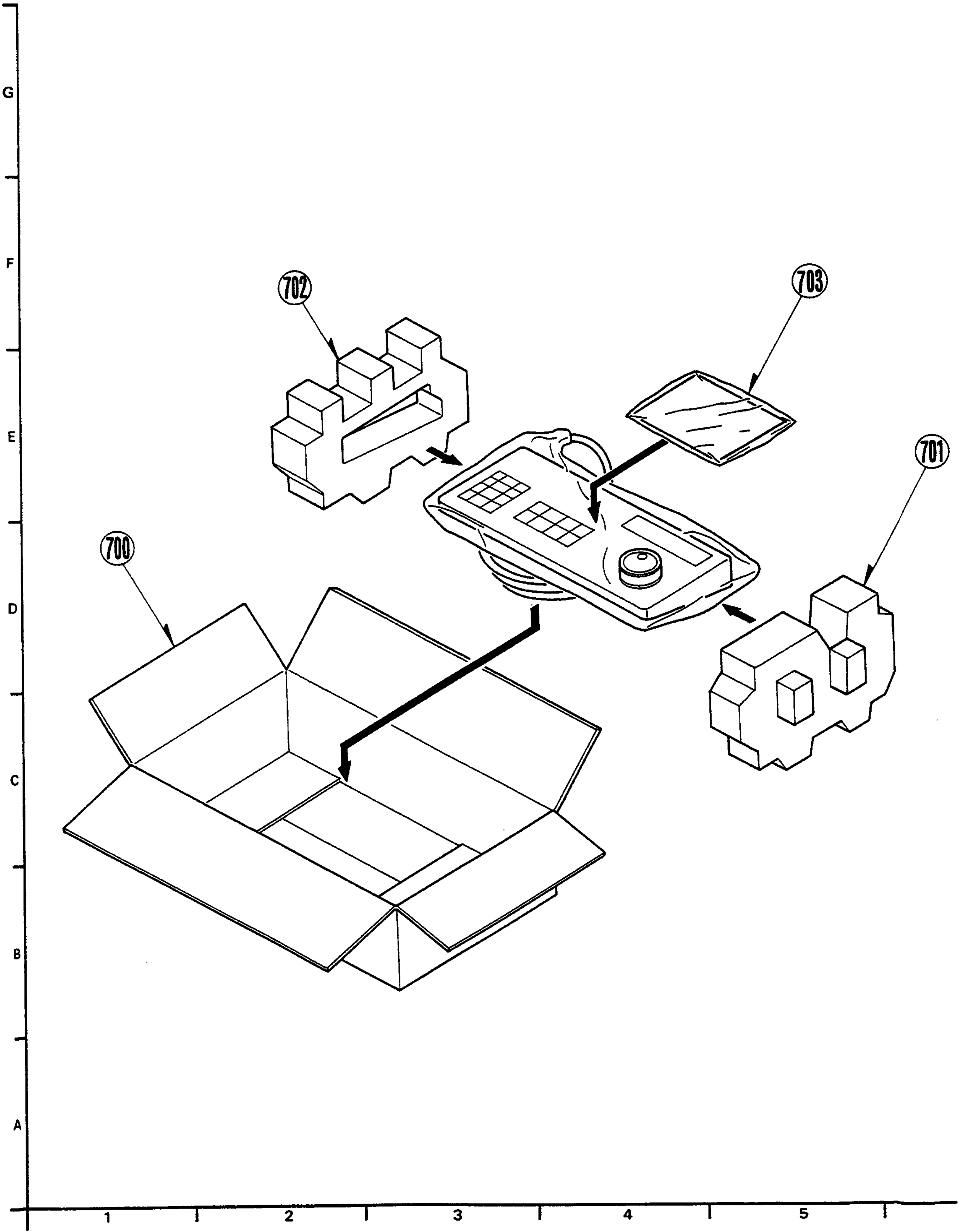
NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

EXPLODED VIEWS

❶ *Casing Parts Section*


⑭
⑮
⑯
⑥
⑦
E3
BACK LIGHT C.B.A.
E7
⑧
E8
XTV3+8J
E2
OPERATION C.B.A.
XWGV4F7Y
XTV3+8J
⑪
XWGV4F7Y
⑨
⑩
E4
SEARCH DIAL C.B.A.
XTV3+6F
XTV4+10J
⑫
XTV4+8J
XTV4+10J
E5
XTV3+8J
XTV4+10J
XTV4+10J
XTV4+8J
③
E1
MAIN C.B.A.
⑬
XTV4+10J
⑤
②
E6
①
④
④
XSB3+16FCS
XSB3+8FCS
G
F
E
D
C
B
A
1
2
3
4
5

❷ *Packing Parts Section*


G
F
E
D
C
B
A
1
2
3
4
5
702
703
701
700

REPLACEMENT PARTS LIST

Notes:

1. • Be sure to make your orders of replacement parts according to this list.
   • "<R>" in Remark column indicates recommended parts.
2. IMPORTANT SAFETY NOTICE
   Components identified by " ! " have special characteristics important for safety.
   When replacing any of these components, use only the original ones.
   Meaning of symbol ! on this parts list is exactly the same as symbol ⚠ on Schematic and Circuit Board Diagrams.
3. Unless otherwise specified;
   All resistors are in OHMS (Ω), K=1,000Ω, M=1,000KΩ.
4. ITEM NUMBERS WITH CAPITAL LETTER E
   Item numbers with capital letter E (Example: E1, E2,...) in Ref. No. column mean that the parts are listed with the E item numbers in the exploded views.
5. The main assembled parts are shown below C.B.A. marked with "■".
6. When ordering parts, use part No. only from Part No. column.
7. Printed circuit board assembly with mark (NLA) is no longer available after discontinuation of the product.

1. MECHANICAL REPLACEMENT PARTS LIST

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VKM1876	BOTTOM CASE	1	<R>
2(1)		VGH2084	SWITCH PLATE	1	
3(1)		VGQ1852	CORD FIXTURE	1	
4(1)		VKA0038	RUBBER FOOT	4	
5(1)		VJA0562	25P CORD	1	<R>
6(1)		VYP2797	TOP CASE UNIT	1	<R>
7(1)		VGH2083	TOP PLATE	1	<R>
8(1)		VKW1186	DISPLAY WINDOW	1	<R>
9(1)		VGU4808	FUNCTION KEY	1	<R>
10(1)		VGQ1851	KEY FIXTURE (A)	1	
11(1)		VGU4807	TEN KEY	1	<R>
12(1)		VGQ1850	KEY FIXTURE (B)	1	
13(1)		VMZ1419	SHIELD PLATE	1	
14(1)		VXU0932	JOG DIAL KNOB	1	<R>
15(1)		VMG0476	RUBBER RING	1	<R>
16(1)		VGU4605	SHUTTLE DIAL KONB	1	<R>
700(2)		VGP4809	PACKING CASE	1	<R>
701(2)		VPN2475	CUSHION (RIGHT)	1	
702(2)		VPN2476	CUSHION (LEFT)	1	
703(2)		VQT3232	OPERATING INSTRUCTIONS	1	<R><!>

2. ELECTRICAL REPLACEMENT PARTS LIST

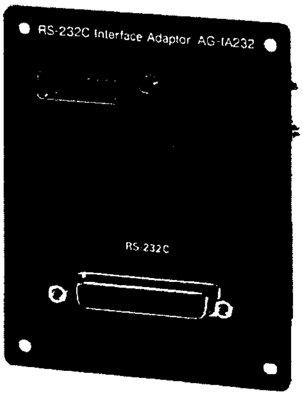
Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
E1		VEP66097A	MAIN C.B.A.	1	(NLA)<R>
E2		VEP66098A	OPERATION C.B.A.	1	(NLA)<R>
E3		VEP66100A	BACK LIGHT C.B.A.	1	(NLA)<R>
E4		VEP00N47B	SEARCH DIAL C.B.A.	1	(NLA)<R>
	■	VEP66097A	MAIN C.B.A.		
C101		ECEA1HKAR22	E.CAPACITOR 50V 0.22U	1	
C102		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C103		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C104,05		ECCF1H100DC	C.CAPACITOR 50V 10P	2	
C106		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C107		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C108-11		ECEA1CKA220	E.CAPACITOR 16V 22U	4	
C112		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C113		ECQM1H104JF	P.CAPACITOR 50V 0.1U	1	
D101-08		MA165	DIODE	8	<R>
D109-12		RD15ESB	DIODE	4	<R>
FL101		VLF0576	FILTER	1	<R>
IC101		D78C12AGQA12	IC	1	<R>
IC102		UPD4711CX	IC	1	<R>
IC103		UPC393C	IC	1	<R>
IC104		MN1280R	IC	1	<R>
L101		VLP0053	COIL	1	
L102		VLQEL05F5R6K	COIL 5.6UH	1	
P101		VJP1511T	CONNECTOR(MALE) 11P	1	
P102		VJP1250T	CONNECTOR(MALE) 10P	1	
P103		VJP1252T	CONNECTOR(MALE) 12P	1	
P104		VJP1248T	CONNECTOR(MALE) 8P	1	
P105		VJP1249T	CONNECTOR(MALE) 9P	1	
Q101		2SB641	TRANSISTOR	1	<R>
R101-05		ERDS2TJ104	C.RESISTOR 1/4W 100K	5	
R106,07		ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R108,09		ERDS2TJ564	C.RESISTOR 1/4W 560K	2	
R110,11		ERDS2TJ563	C.RESISTOR 1/4W 56K	2	
R112		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R113		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R114		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R115,16		ERDS2TJ203	C.RESISTOR 1/4W 20K	2	
R117		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R118,19		ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R120		ERDS2TJ681	C.RESISTOR 1/4W 680	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
SW101		VST0096	SWITCH	1	<R>
SW102		VSS0154	SWITCH	1	<R>
X101		VSX0286	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
E5		VSC2884	SHIELD CASE (TOP)	1	
E6		VSC2885	SHIELD CASE (BOTTOM)	1	
	■	VEP66098A	OPERATION C.B.A.		
C201-04		ECKF1H1032F	C.CAPACITOR 50V 0.01U	4	
D301-04		LN840RCP	DIODE	4	<R>
D305,06		LN31GCPHLG3	DIODE	2	<R>
D307-10		LN840RCP	DIODE	4	<R>
D311		LN81RCPHL	LED	1	<R>
D312-21		MA165	DIODE	10	<R>
D323-28		MA165	DIODE	6	<R>
IC201		UPD7225G00	IC	1	<R>
LCD201		VSL0176	LCD	1	<R>
P201		VJP1248T	CONNECTOR(MALE) 8P	1	
P202		VJP1249T	CONNECTOR(MALE) 9P	1	
P203		VJP1236T	CONNECTOR(MALE) 9P	1	
P301		VJP1250T	CONNECTOR(MALE) 10P	1	
P302		VJP1252T	CONNECTOR(MALE) 12P	1	
Q301-04		2SB641	TRANSISTOR	4	<R>
Q305-07		2SD636	TRANSISTOR	3	<R>
R201-03		ERDS2TJ104	C.RESISTOR 1/4W 100K	3	
R204		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R205		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R206		ERDS2TJ474	C.RESISTOR 1/4W 470K	1	
R207		EROS2CKG1803	M.RESISTOR 1/4W 180K	1	
R208		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R301		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R302		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R303		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R304		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R305		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R306		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R307		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R308		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R309-12		ERDS2TJ101	C.RESISTOR 1/4W 100	4	
R313-15		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	3	
SW301-04		EVQQSB04B	SWITCH	4	<R>
SW305-08		EVQQJ104K	SWITCH	4	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
SW309-12		EVQQSB04B	SWITCH	4	<R>
SW313-16		EVQQJ104K	SWITCH	4	<R>
SW317-20		EVQQSB04B	SWITCH	4	<R>
SW321-32		EVQQJ104K	SWITCH	12	<R>
	■	VEP66100A	BACK LIGHT C.B.A.		
D501		VGL0404	DIODE	1	<R>
R501,02		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	2	
			MISCELLANEOUS		
E7		VMX1646	SPACER	1	
	■	VEP00N47B	SEARCH DIAL C.B.A.		
P401		VJP1243T	CONNECTOR(MALE) 3P	1	
P402		VJP1246T	CONNECTOR(MALE) 6P	1	
			MISCELLANEOUS		
E8		VSQ0651	JOG/SHUTLE DIAL	1	<R>

RS-232C Interface Adaptor

AG-IA232-E



SPECIFICATIONS

ITEM	SPECIFICATION
Connector	D-SUB25P
Cable	RS-232-C Cable (Straight Type)
Data Format	Asynchronus, Full duplex Start Bit: 1 Bit Stop Bit: 1 Bit/2 Bit Parity: NONE/ODD/EVEN Speed: 600/1200/2400/4800 BPS
Operating Condition	Temperature: 5 ℃～40 ℃ Humidity: 35%～80%
Dimensions	82 (W) × 100 (D) × 24 (H) mm
Weight	Approx. 150 g

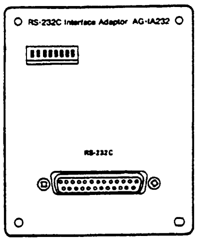
Specifications are subject to change without notice.
Weight and dimensions shown are approximate.

CONTENTS

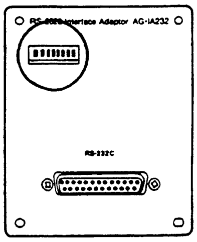
OPERATING INSTRUCTIONS 7-3
CIRCUIT BOARD 7-4
SCHEMATIC DIAGRAM 7-5
EXPLODED VIEWS 7-7
REPLACEMENT PARTS LIST 7-8
1. MECHANICAL REPLACEMENT PARTS LIST 7-8
2. ELECTRICAL REPLACEMENT PARTS LIST 7-8

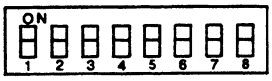
RS-232C Interface Adaptor

•AG-IA232


RS-232C Interface Adaptor AG-IA232
RS-232C

•Dip Switch of AG-IA232


RS-232C Interface Adaptor AG-IA232
RS-232C


ON
1
2
3
4
5
6
7
8

The Dip Switches 2~7 under RS-232C Interface are as shown below.
(Dip Switches 1 and 8 are not used.)

•Stop Bit

	SW2
1 Bit	ON
2 Bit	OFF

•Baud Rate

	SW6	SW7
4800	ON	ON
2400	OFF	ON
1200	ON	OFF
600	OFF	OFF

•Parity

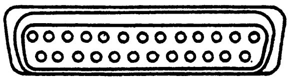
	SW3	SW4
NONE	ON	ON
ODD	OFF	ON
NONE	ON	OFF
EVEN	OFF	OFF

•Bit Length

	SW5
7 Bit	ON
8 Bit	OFF

When the VTR is connected to the optional Remote Controller AG-A730, the operation buttons, mode selection, dial function, etc. can be remote controlled.
For details about AG-IA232, please contact your authorized local dealer.

•Signal of Connector (25P)

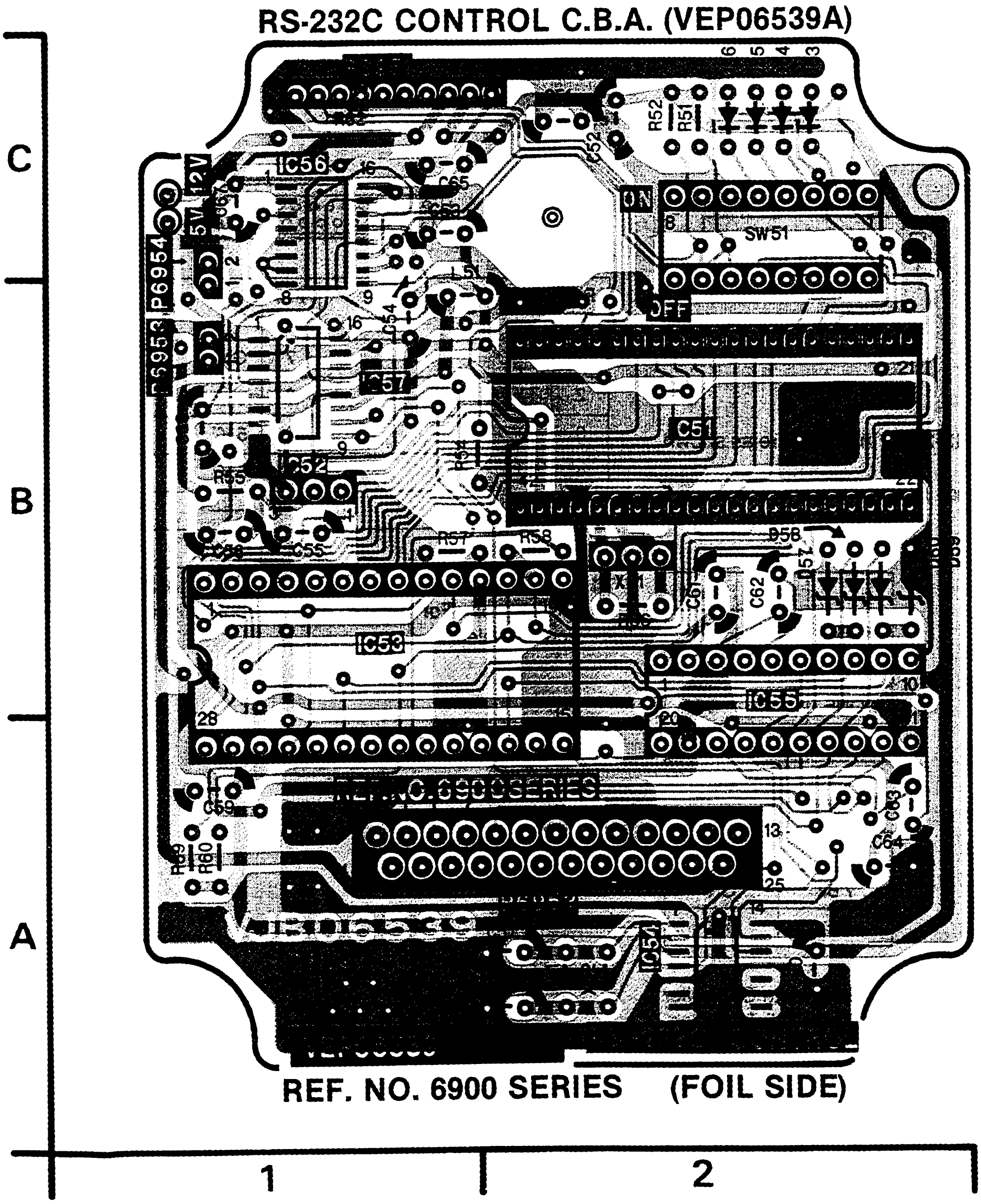


Pin No.	Contents	Pin No.	Contents
1	GND	7	GND
2	TXD	8	——
3	RXD	9	5 V[*1]
4	RTS	10	5 V[*1]
5	CTS	11~24	——
6	——	25	12 V[*1]

*1: Depending on the connection, pin No. 9, 10, 25 may be no connection. For details, please contact your authorized local dealer.

RS-232C CONTROL C.B.A. (VEP06539A)

RS-232C CONTROL C.B.A. (VEP06539A)

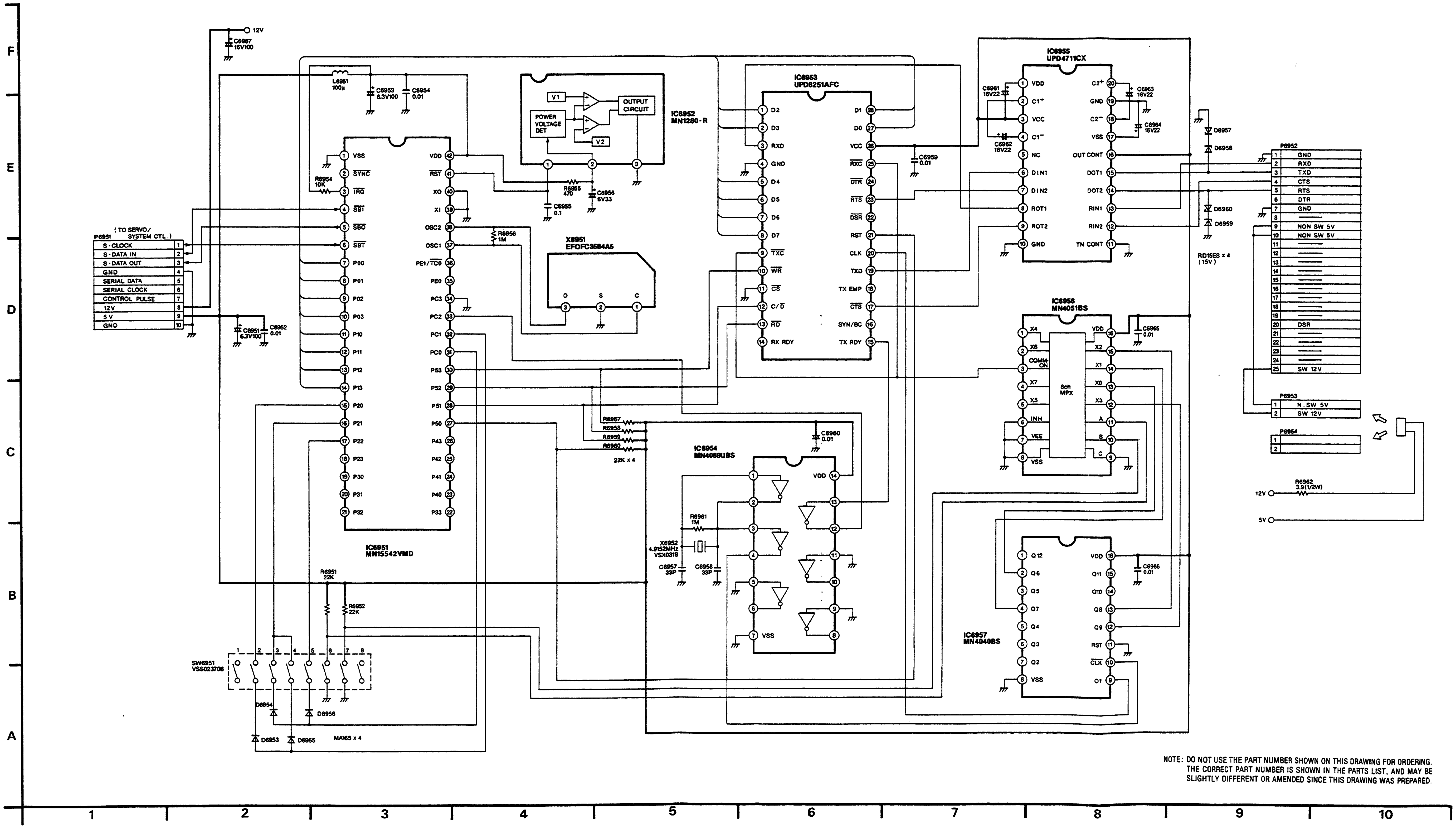

C
B
A
1
2
6
5
4
3
R52
R51
C52
IC56
12V
5V
P6954
P6953
C65
C53
L51
C54
IC57
ON
SW51
8
OFF
21
C51
22
R54
IC52
R55
C60
C55
R57
R58
D58
D57
D59
C61
C62
IC53
IC55
28
20
10
1
REF. NO. 6900 SERIES
C59
R59
R60
13
25
C63
C64
IC54
VEP06539

REF. NO. 6900 SERIES (FOIL SIDE)

RS-232C CONTROL C.B.A.	
Transistor	
Q6601	C-1
Q6602	A-2
Q6603	A-2
Transistor & Resistor	
QR6609	A-1
Integrated Circuit	
IC6601	B-1
IC6602	B-2
IC6603	C-2
Connector	
P6601	C-1
P6602	A-2

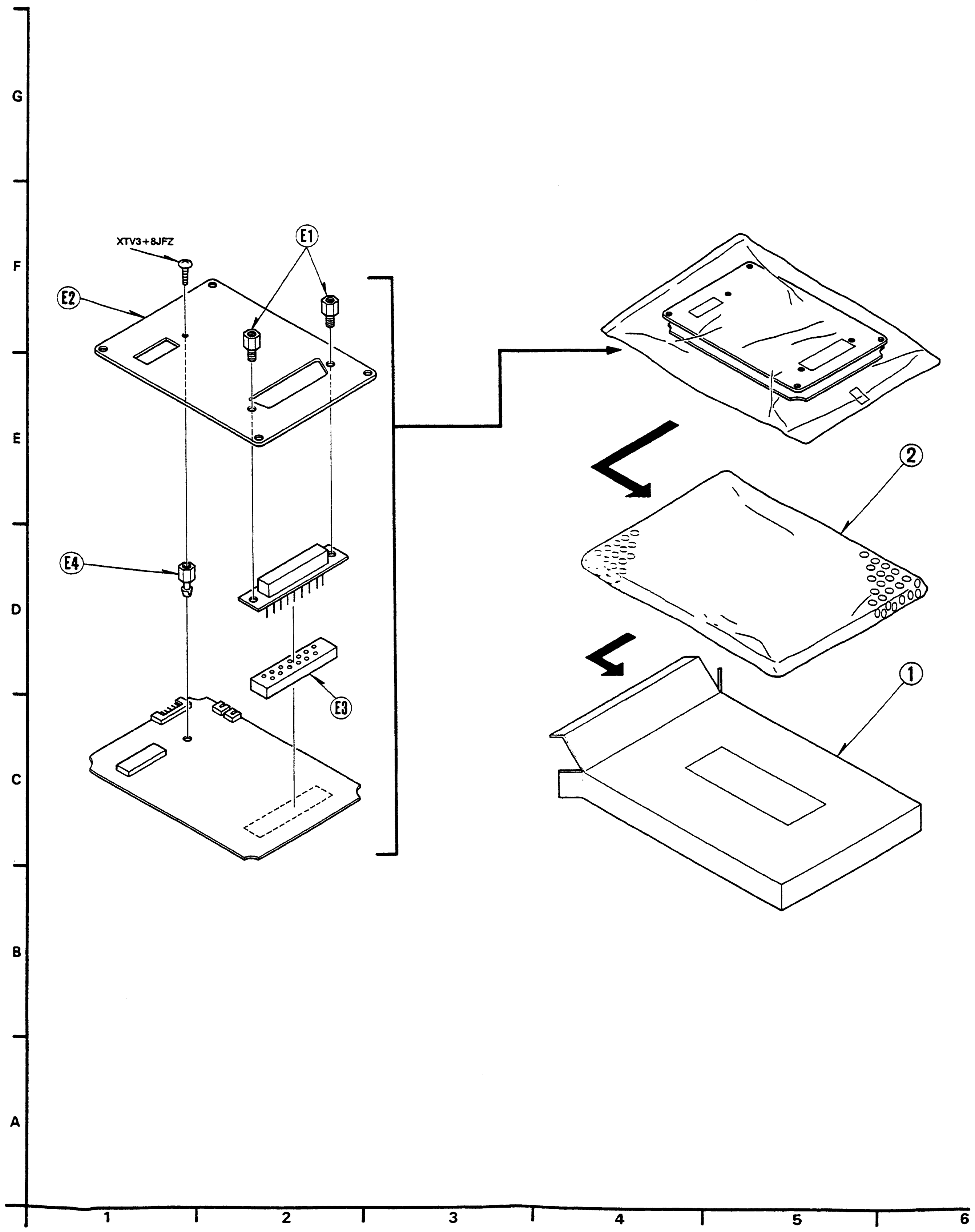
ADDRESS INFORMATION

RS-232C CONTROL SCHEMATIC DIAGRAM


F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
12V
C6967 16V100
(TO SERVO/ SYSTEM CTL.)
P6951
S-CLOCK 1
S-DATA IN 2
S-DATA OUT 3
GND 4
SERIAL DATA 5
SERIAL CLOCK 6
CONTROL PULSE 7
12V 8
5V 9
GND 10
C6951 6.3V100
C6952 0.01
L6951 100μ
C6953 6.3V100
C6954 0.01
R6954 10K
IC6951 MN15542VMD
VSS
SYNC
IRQ
SBI
SBO
SBT
P00
P01
P02
P03
P10
P11
P12
P13
P20
P21
P22
P23
P30
P31
P32
VDD
RST
XO
XI
OSC2
OSC1
PE1/TC0
PE0
PC3
PC2
PC1
PC0
P53
P52
P51
P50
P43
P42
P41
P40
P33
R6956 1M
V1
V2
POWER VOLTAGE DET
OUTPUT CIRCUIT
IC6952 MN1280-R
R6955 470
C6956 6V33
C6955 0.1
X6951 EFOFC3584A5
O S C
R6957
R6958
R6959
R6960
22K x 4
IC6953 UPD8251AFC
D2
D3
RXD
GND
D4
D5
D6
D7
TXC
WR
CS
C/D
RD
RX RDY
D1
D0
VCC
RXC
DTR
RTS
DSR
RST
CLK
TXD
TX EMP
CTS
SYN/BC
TX RDY
C6959 0.01
IC6954 MN4069UBS
VDD
VSS
C6960 0.01
R6961 1M
X6952 4.9152MHz VSX0318
C6957 33P
C6958 33P
R6951 22K
R6952 22K
SW6951 VSS023708
D6954
D6956
D6953
D6955
MA165 x 4
IC6955 UPD4711CX
C6961 16V22
C6962 16V22
C6963 16V22
C6964 16V22
VDD
C1+
VCC
C1−
NC
DIN1
DIN2
ROT1
ROT2
GND
C2+
GND
C2−
VSS
OUT CONT
DOT1
DOT2
RIN1
RIN2
TN CONT
D6957
D6958
D6960
D6959
RD15ES x 4 (15V)
IC6956 MN4051BS
X4
X6
COMM-ON
X7
X5
INH
VEE
VSS
VDD
X2
X1
X0
X3
A
B
C
8ch MPX
C6965 0.01
IC6957 MN4040BS
Q12
Q6
Q5
Q7
Q4
Q3
Q2
VSS
VDD
Q11
Q10
Q8
Q9
RST
CLK
Q1
C6966 0.01
P6952
1 GND
2 RXD
3 TXD
4 CTS
5 RTS
6 DTR
7 GND
8 ———
9 NON SW 5V
10 NON SW 5V
11 ———
12 ———
13 ———
14 ———
15 ———
16 ———
17 ———
18 ———
19 ———
20 DSR
21 ———
22 ———
23 ———
24 ———
25 SW 12V
P6953
1 N.SW 5V
2 SW 12V
P6954
1
2
R6962 3.9(1/2W)
12V
5V

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.
THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

EXPLODED VIEWS



REPLACEMENT PARTS LIST

Notes:

1. • Be sure to make your orders of replacement parts according to this list.
   • "<R>" in Remark column indicates recommended parts.
2. IMPORTANT SAFETY NOTICE
   Components identified by " ! " have special characteristics important for safety.
   When replacing any of these components, use only the original ones.
   Meaning of symbol ! on this parts list is exactly the same as symbol ⚠ on Schematic and Circuit Board Diagrams.
3. Unless otherwise specified;
   All resistors are in OHMS (Ω), K=1,000Ω, M=1,000 KΩ.
4. ITEM NUMBERS WITH CAPITAL LETTER E
   Item numbers with capital letter E (Example: E1, E2,...) in Ref. No. column mean that the parts are listed with the E item numbers in the exploded views.
5. The main assembled parts are shown below C.B.A. marked with "■".
6. When ordering parts, use part No. only from Part No. column.
7. Printed circuit board assembly with mark (NLA) is no longer available after discontinuation of the product.

1. MECHANICAL REPLACEMENT PARTS LIST

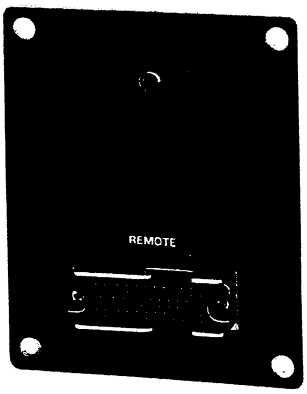
Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1		VPK1037	PACKING CASE	1	<R>
2		VPN2445	CUSHION	1	

2. ELECTRICAL REPLACEMENT PARTS LIST

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP06539A	RS232C CONTROL C.B.A.		
C6951		ECEA0JKS101	E.CAPACITOR 6.3V 100U	1	
C6952		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6953		ECEA0JKS101	E.CAPACITOR 6.3V 100U	1	
C6954		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6955		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C6956		ECEA0JKS330	E.CAPACITOR 6.3V 33U	1	
C6957,58		ECCF1H330JC	C.CAPACITOR 50V 33P	2	
C6959,60		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C6961-64		ECEA1CKS220	E.CAPACITOR 16V 22U	4	
C6965,66		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C6967		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
D6953-56		MA165	DIODE	4	<R>
D6957-60		RD15ESB	DIODE	4	<R>
IC6951		MN15542VMD	IC	1	<R>
IC6952		MN1280R	IC	1	<R>
IC6953		UPD8251AFC	IC	1	<R>
IC6954		MN4069UBS	IC	1	<R>
IC6955		UPD4711CX	IC	1	<R>
IC6956		MN4051BS	IC	1	<R>
IC6957		MN4040BS	IC	1	<R>
L6951		VLQEL05F101K	COIL 100UH	1	
P6951		VJP1250T	CONNECTOR(MALE) 10P	1	
P6952		VJS2772	CONNECTOR(FEMALE) 25P	1	
P6953,54		VJP1242T	CONNECTOR(MALE) 2P	2	
R6951,52		ERDS2TJ223	C.RESISTOR 1/4W 22K	2	
R6954		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6955		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R6956		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R6957-60		ERDS2TJ223	C.RESISTOR 1/4W 22K	4	
R6961		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R6962		ERQ12AJ3R9P	F.RESISTOR 1/2W 3.9	1	<R>
SW6951		VSS023708	SWITCH	1	<R>
X6951		EF0FC3584A5	CRYSTAL OSCILLATOR	1	<R>
X6952		VSX0318	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
E1		VHD0510	PANEL SCREW	2	
E2		VMP2086	PANEL	1	<R>
E3		VMX1582	SPACER	1	
E4		VMX1636	SPACER	1	

34P Interface Adaptor

AG-IA34-E



SPECIFICATIONS

ITEM	SPECIFICATION
Connector	34P Remote Connector
Operating Condition	Temperature: 5℃～40℃ Humidity: 35%～80%
Dimensions	82 (W) × 100 (D) × 28.5 (H) mm
Weight	Approx. 130g

CONTENTS

OPERATING INSTRUCTIONS 8-3

CIRCUIT BOARD 8-4

SCHEMATIC DIAGRAM 8-5

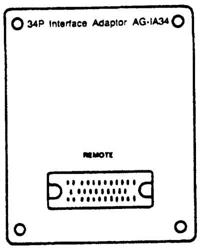
EXPLODED VIEWS 8-7

REPLACEMENT PARTS LIST 8-8

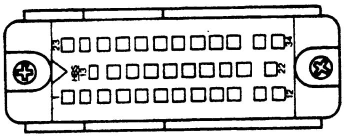
1. MECHANICAL REPLACEMENT PARTS LIST 8-8
2. ELECTRICAL REPLACEMENT PARTS LIST 8-8

34P Interface Adaptor

•AG-IA34



•Signal of Connector (34P)

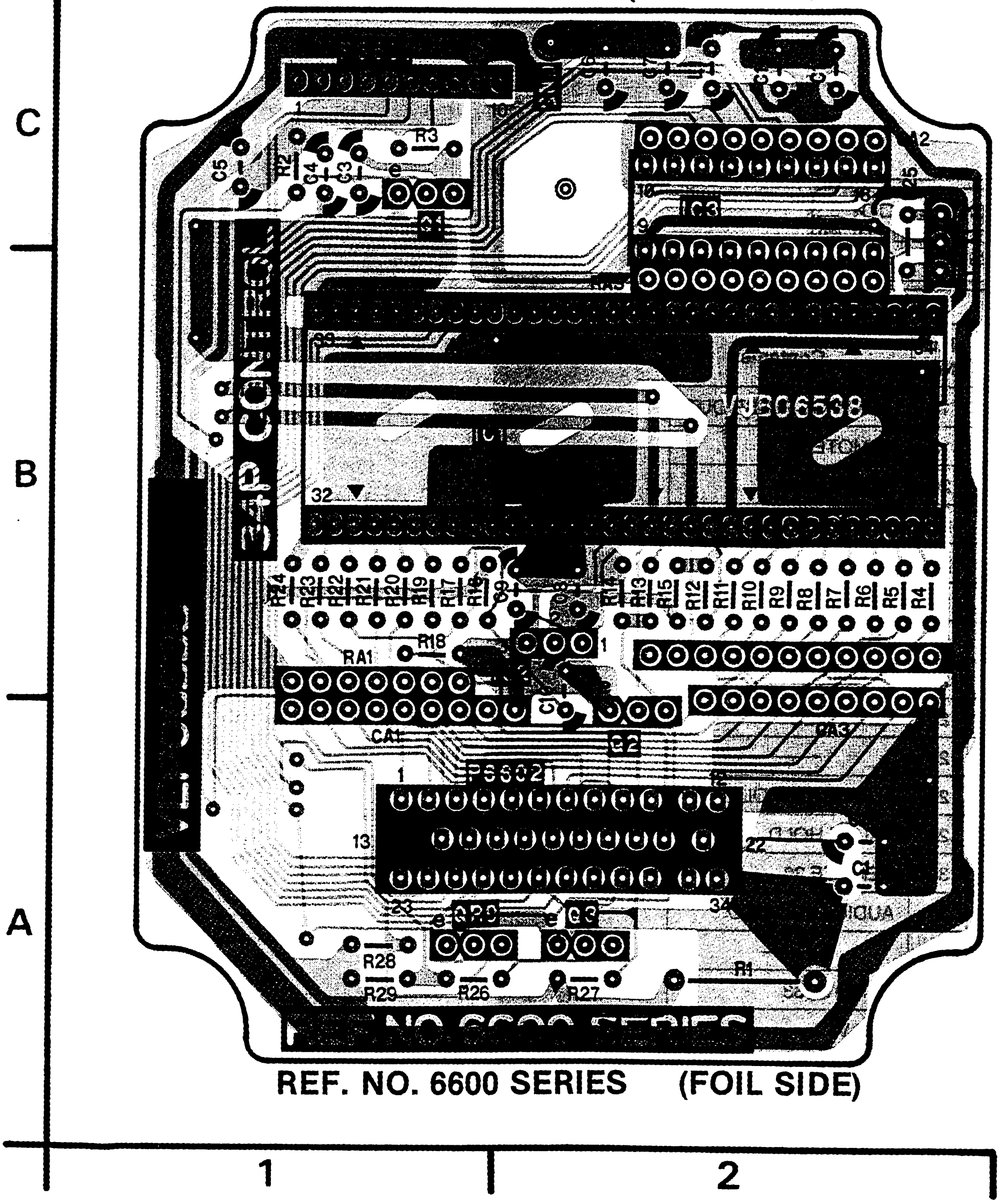


Pin No.	Contents	Pin No.	Contents
1	REC SWITCH*	18	CONTROL PULSE OUT
2	PLAY SWITCH	19	REMOTE 19
3	FF SWITCH	20	START MARK
4	REW SWITCH	21	EJECT SWITCH
5	STOP SWITCH	22	———
6	AUDIO DUB SWITCH	23	REC HOLD
7	PAUSE SWITCH	24	PLAY HOLD
8	CASSETTE IN	25	FF HOLD
9	AUDIO DUB SWITCH	26	REW HOLD
10	FF, REW SLOW DOWN	27	———
11	———	28	AUDIO DUB HOLD
12	GND	29	PAUSE HOLD
13	FRAME ADV. SWITCH	30	REMOTE 30
14	REVERSE COUNT	31	AUDIO DUB HOLD
15	———	32	———
16	EDIT SWITCH	33	REMOTE 33
17	REVERSE	34	+12 V

***Note:**
When the voltage on the pin is LOW, the unit will go into the REC mode.

34P CONTROL C.B.A. (VEP06539A)

34P CONTROL C.B.A. (VEP06539A)

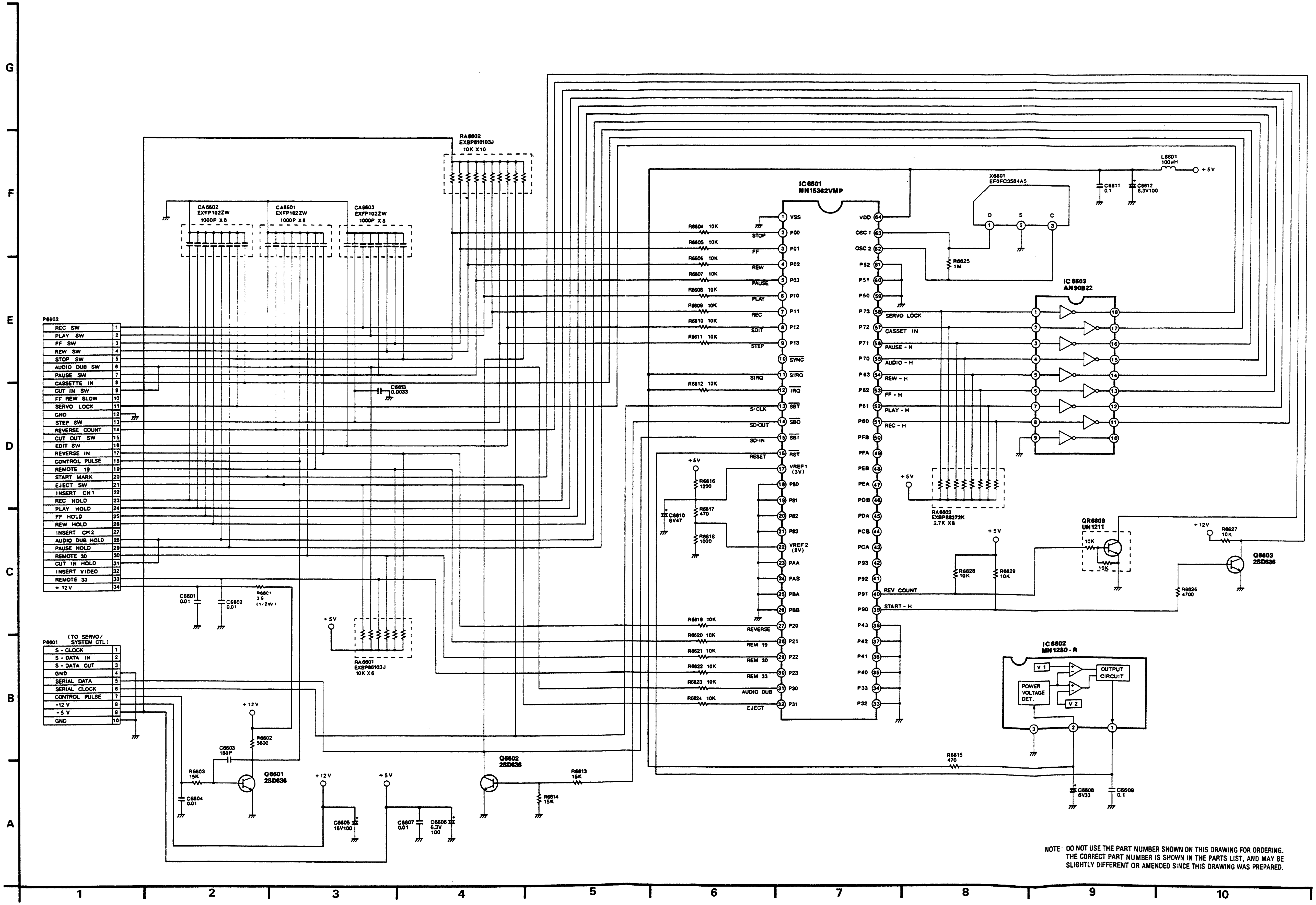

C
B
A
1
2
R3
R2
C4
C3
C5
Q1
IC3
IC1
VJB06538
R24
R23
R22
R21
R20
R19
R17
R16
R14
R13
R15
R12
R11
R10
R9
R8
R7
R6
R5
R4
R18
RA1
CA1
RA3
Q2
P6602
R28
R29
R26
R27
R1
34P CONTROL

REF. NO. 6600 SERIES (FOIL SIDE)

34P CONTROL C.B.A.	
Integrated Circuit	
IC6951	B-2
IC6952	B-1
IC6953	B-1
IC6954	A-2
IC6955	B-2
IC6956	C-1
IC6957	B-1
Connector	
P6952	A-2
P6953	B-1
P6954	B-1

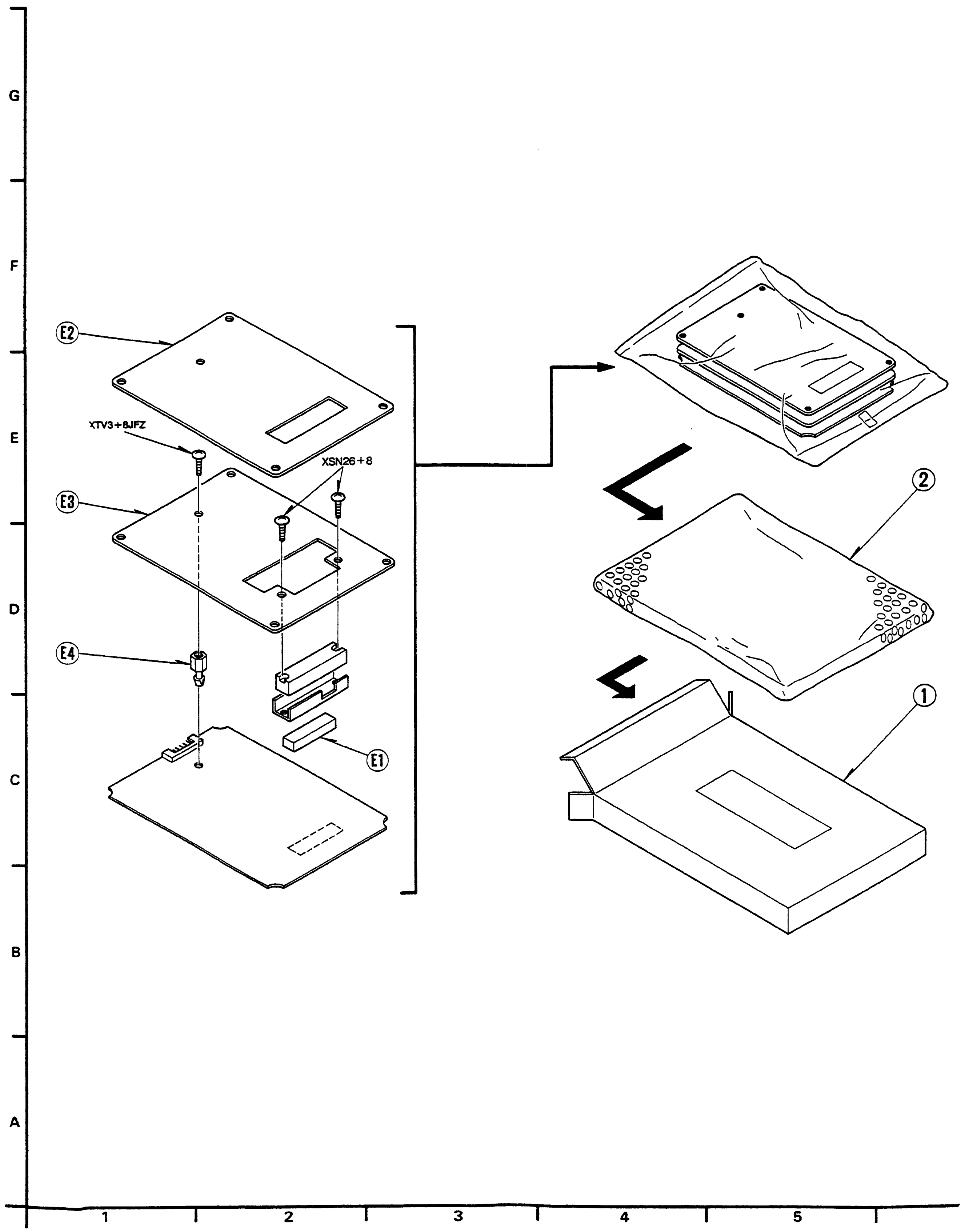
ADDRESS INFORMATION

34P CONTROL SCHEMATIC DIAGRAM


G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
P6602
REC SW 1
PLAY SW 2
FF SW 3
REW SW 4
STOP SW 5
AUDIO DUB SW 6
PAUSE SW 7
CASSETTE IN 8
CUT IN SW 9
FF REW SLOW 10
SERVO LOCK 11
GND 12
STEP SW 13
REVERSE COUNT 14
CUT OUT SW 15
EDIT SW 16
REVERSE IN 17
CONTROL PULSE 18
REMOTE 19 19
START MARK 20
EJECT SW 21
INSERT CH1 22
REC HOLD 23
PLAY HOLD 24
FF HOLD 25
REW HOLD 26
INSERT CH2 27
AUDIO DUB HOLD 28
PAUSE HOLD 29
REMOTE 30 30
CUT IN HOLD 31
INSERT VIDEO 32
REMOTE 33 33
+ 12V 34
P6601 (TO SERVO/ SYSTEM CTL)
S - CLOCK 1
S - DATA IN 2
S - DATA OUT 3
GND 4
SERIAL DATA 5
SERIAL CLOCK 6
CONTROL PULSE 7
+12 V 8
+5 V 9
GND 10
CA6602 EXFP102ZW 1000P X 8
CA6601 EXFP102ZW 1000P X 8
CA6603 EXFP102ZW 1000P X 8
RA6602 EXBP810103J 10K X10
C6613 0.0033
C6601 0.01
C6602 0.01
R6601 39 (1/2W)
+5V
RA6601 EXBP86103J 10K X6
+12V
R6602 5600
C6603 180P
R6603 15K
C6604 0.01
Q6601 2SD636
+12V
C6605 16V100
+5V
C6607 0.01
C6606 6.3V 100
Q6602 2SD636
R6613 15K
R6614 15K
IC6601 MN15362VMP
R6604 10K
R6605 10K
R6606 10K
R6607 10K
R6608 10K
R6609 10K
R6610 10K
R6611 10K
STOP
FF
REW
PAUSE
PLAY
REC
EDIT
STEP
SIRQ
R6612 10K
S-CLK
SD-OUT
SD-IN
RESET
+5V
R6616 1200
C6610 6V47
R6617 470
R6618 1000
R6619 10K
R6620 10K
R6621 10K
R6622 10K
R6623 10K
R6624 10K
REVERSE
REM 19
REM 30
REM 33
AUDIO DUB
EJECT
1 VSS
2 P00
3 P01
4 P02
5 P03
6 P10
7 P11
8 P12
9 P13
10 SYNC
11 SIRQ
12 IRQ
13 SBT
14 SBO
15 SBI
16 RST
17 VREF1 (3V)
18 P80
19 P81
20 P82
21 P83
22 VREF2 (2V)
23 PAA
24 PAB
25 PBA
26 PBB
27 P20
28 P21
29 P22
30 P23
31 P30
32 P31
VDD 64
OSC 1 63
OSC 2 62
P52 61
P51 60
P50 59
P73 58
P72 57
P71 56
P70 55
P63 54
P62 53
P61 52
P60 51
PFB 50
PFA 49
PEB 48
PEA 47
PDB 46
PDA 45
PCB 44
PCA 43
P93 42
P92 41
P91 40
P90 39
P43 38
P42 37
P41 36
P40 35
P33 34
P32 33
SERVO LOCK
CASSET IN
PAUSE - H
AUDIO - H
REW - H
FF - H
PLAY - H
REC - H
REV COUNT
START - H
X6601 EF0FC3584A5
O S C
R6625 1M
C6611 0.1
C6612 6.3V100
L6601 100μH
+5V
IC6603 AN90B22
+5V
RA6603 EXBP88272K 2.7K X8
+5V
R6628 10K
R6629 10K
QR6609 UN1211
10K
10K
+12V
R6627 10K
Q6603 2SD636
R6626 4700
IC6602 MN1280 - R
V 1
V 2
POWER VOLTAGE DET.
OUTPUT CIRCUIT
R6615 470
C6608 6V33
C6609 0.1

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

EXPLODED VIEWS



REPLACEMENT PARTS LIST

Notes:

1. • Be sure to make your orders of replacement parts according to this list.
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2. IMPORTANT SAFETY NOTICE
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3. Unless otherwise specified;
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4. ITEM NUMBERS WITH CAPITAL LETTER E
   Item numbers with capital letter E (Example: E1, E2,...) in Ref. No. column mean that the parts are listed with the E item numbers in the exploded views.
5. The main assembled parts are shown below C.B.A. marked with "■".
6. When ordering parts, use part No. only from Part No. column.
7. Printed circuit board assembly with mark (NLA) is no longer available after discontinuation of the product.

1. MECHANICAL REPLACEMENT PARTS LIST

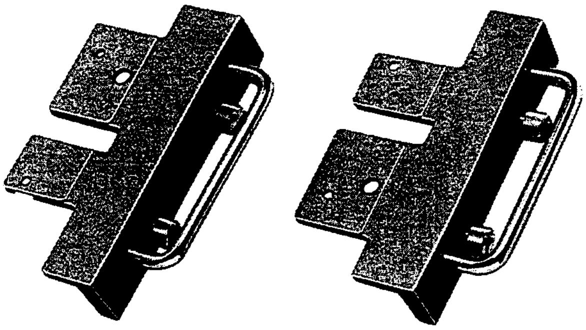
Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1		VPK1037	PACKING CASE	1	<R>
2		VPN2445	CUSHION	1	

2. ELECTRICAL REPLACEMENT PARTS LIST

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP06538A	34P CONTROL C.B.A.		
C6601,02		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C6603		ECCF1H181J	C.CAPACITOR 50V 180P	1	
C6604		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6605		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C6606		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C6607		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C6608		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C6609		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C6610		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C6611		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C6612		ECEA0JK101U	E.CAPACITOR 6.3V 100U	1	
C6613		ECQB1H332JZ	P.CAPACITOR 50V 3300P	1	
CA6601-03		EXFP81022W	C & C	3	
IC6601		MN15362VMP	IC	1	<R>
IC6602		MN1280R	IC	1	<R>
IC6603		AN90B22	IC	1	<R>
L6601		VLQEL05F101K	COIL 100UH	1	
P6601		VJP1250T	CONNECTOR(MALE) 10P	1	
P6602		VJS1327	CONNECTOR(FEMALE) 34P	1	<R>
Q6601-03		2SD636	TRANSISTOR	3	(Q,R)<R>
QR6609		UN1211	TRANSISTOR-RESISTOR	1	<R>
R6601		ERQ12AJ3R9P	FUSE 1/2W 3.9	1	<R>
R6602		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R6603		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R6604-12		ERDS2TJ103	C.RESISTOR 1/4W 10K	9	
R6613,14		ERDS2TJ153	C.RESISTOR 1/4W 15K	2	
R6615		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R6616		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R6617		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R6618		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R6619-24		ERDS2TJ103	C.RESISTOR 1/4W 10K	6	
R6625		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R6626		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R6627-29		ERDS2TJ103	C.RESISTOR 1/4W 10K	3	
RA6601		EXBP86103J	RESISTOR&RESISTOR 10K	1	
RA6602		EXBP810103J	COMBI R-R	1	
RA6603		EXBP88272K	COMBI R-R	1	
X6601		EF0FC3584A5	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
E1		VMX0674	34P SPACER	1	
E2		VGH1979	PLATE	1	
E3		VMP2085	PLATE	1	
E4		VMX1636	SPACER	1	

Rack Mount Adaptor

AG-M730-E



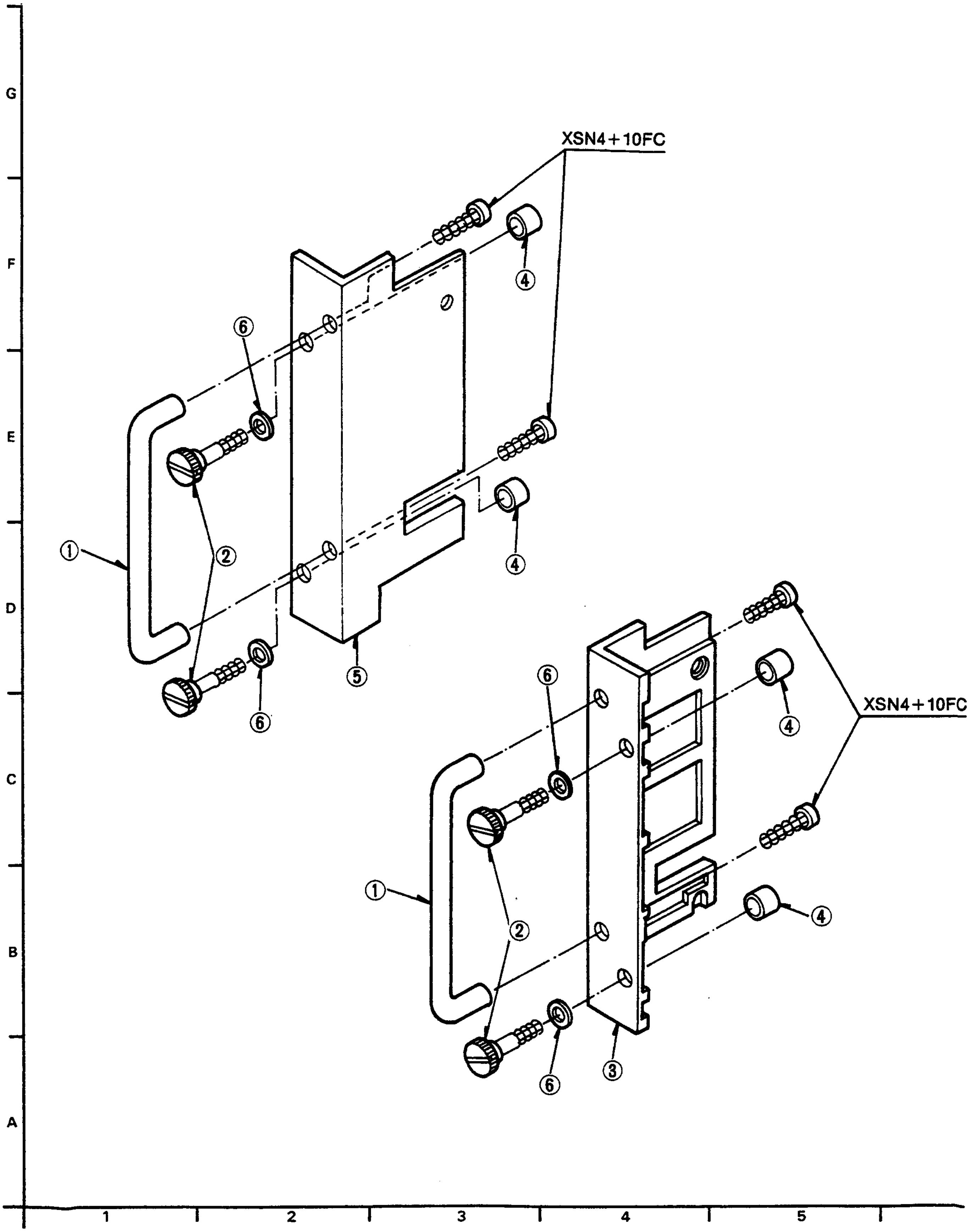
CONTENTS

EXPLODED VIEWS 9-3

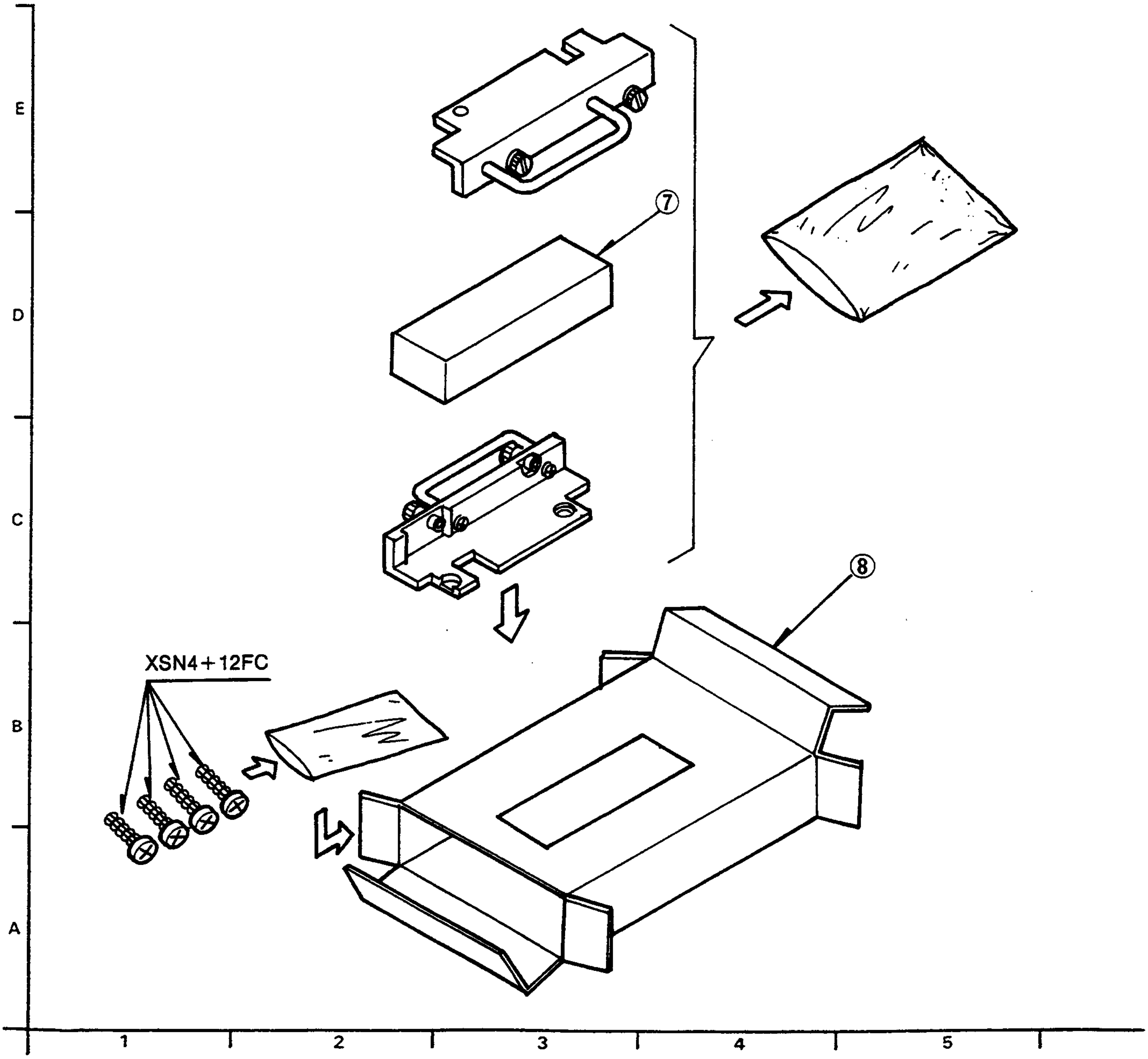
REPLACEMENT PARTS LIST 9-4

EXPLODED VIEWS

❶ Frame Parts Section


G
F
E
D
C
B
A
1
2
3
4
5
XSN4+10FC
④
⑥
①
②
⑤
⑥
④
XSN4+10FC
⑥
④
①
②
④
⑥
③

❷ Packing Parts Section



REPLACEMENT PARTS LIST

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VKH0185	HANDLE	2	
2(1)		VHD0306	SCREW	4	
3(1)		VMP2233	PACK MOUNTING ANGLE (R)	1	
4(1)		VMX0871	SPACER	4	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
5(1)		VMP2232	PACK MOUNTING ANGLE (L)	1	
6(1)		VMX0658	WASHER	4	
7(2)		VPN2448	CUSHION	1	
8(2)		VPK1038	PACKING CASE	1	

Order No. VRD9002S673

Service Manual

Supplement

Effective from : First Production

Video Product

Model No. AG-7330-E/B/A/EP/EG
Bulletin No. 2

Subject : Correction in Part Numbers List

Please use this manual together with the Service Manual for Order No. VRD8904M612
Model No. AG-7330-E/B/A/EP/EG

Interchangeability Code See the I/C column on the following Parts Number list.

	Parts	Set Production		Parts	Set Production		Parts	Set Production		Parts	Set Production		
A	Original	Early	B	Original	Early	C	Original	Early	D	Original	Early	E	Addition
	New	Late		New	Late		New	Late		New	Late	F	Deletion
												G	Other

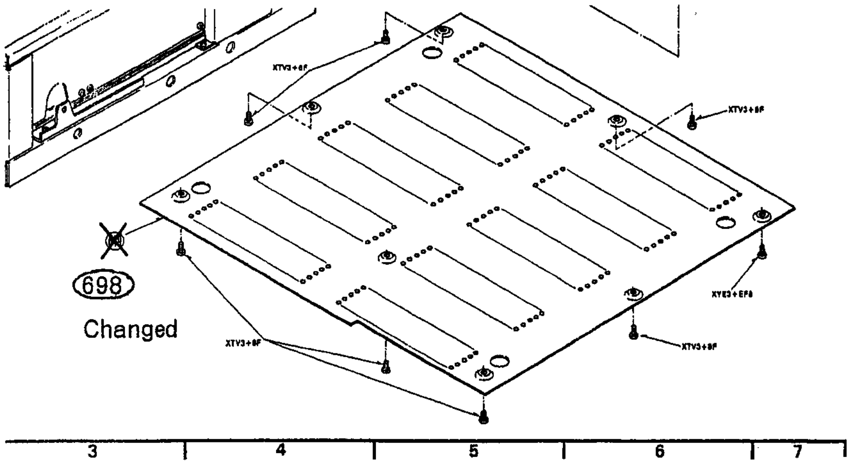
Parts Number

Ref No.	Original Part No.	New Part No.	Part Name & Descriptions	I/C	Remarks
169(3)	VKF1423	VKF1243	BLINDER PANEL	G	
600(4)	VGN1952	VGH1952	JACK NAME PLATE	G	
619(4)	VKM1738	-----	BOTTOM COVER	G	
621(4)	-----	VKM1738	BOTTOM COVER	G	
648(5)	VMZ0172	VMG0172	CUSHION RUBBER	G	
696(6)	-----	VMZ1507	INSULATION BARRIER (B)	E	
697(6)	-----	VMZ1506	INSULATION BARRIER (A)	E	
754(7)	VJA0510	VJA0570	Y/C CABLE	G	
757(7)	VQT3173	VQT3175	OPERATING INSTRUCTIONS	G	<R>AG-7330-EP(I/S)

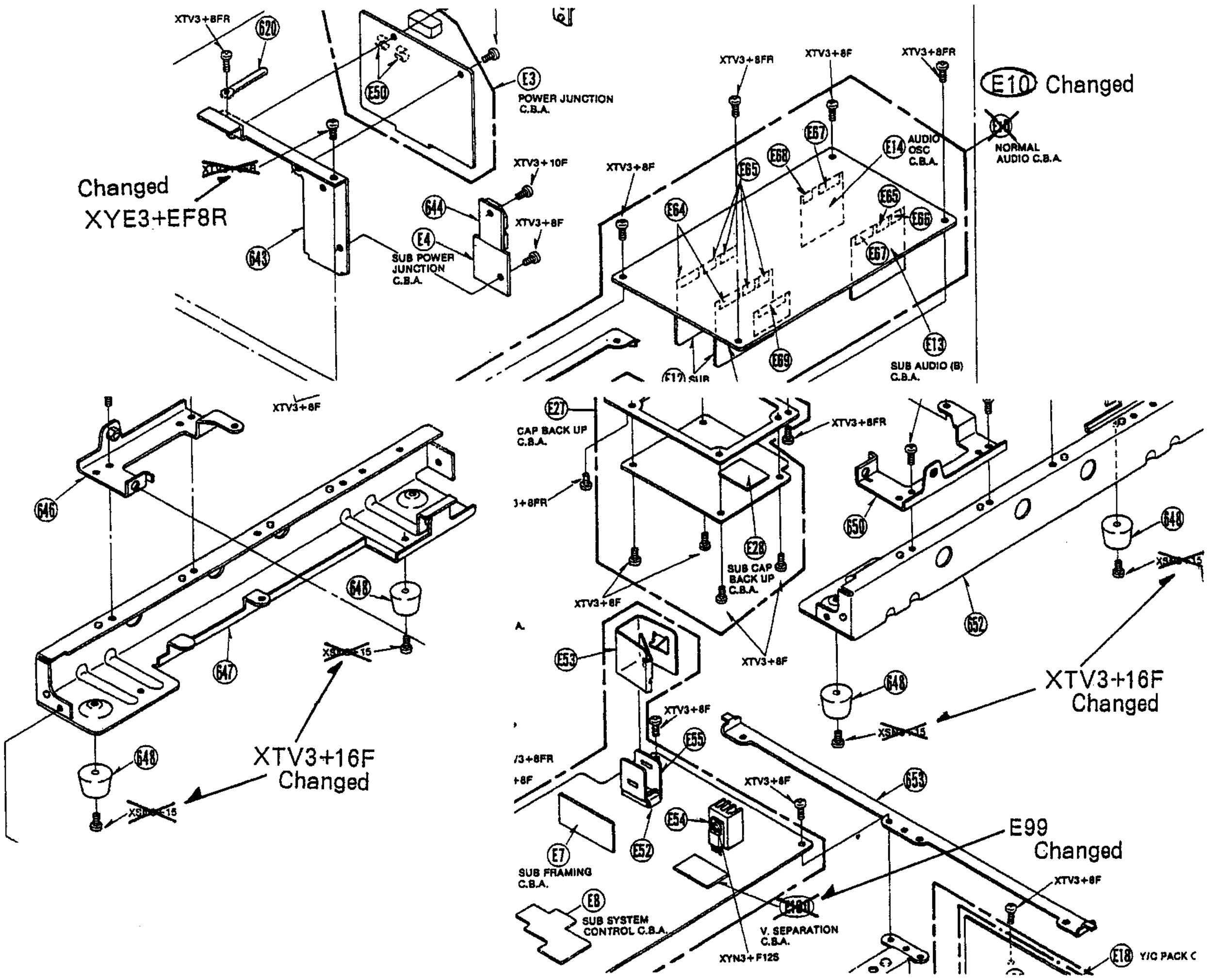
Panasonic/National

Matsushita Electric Industrial Co., Ltd.
Central P.O. Box 288, Osaka 530-91, Japan

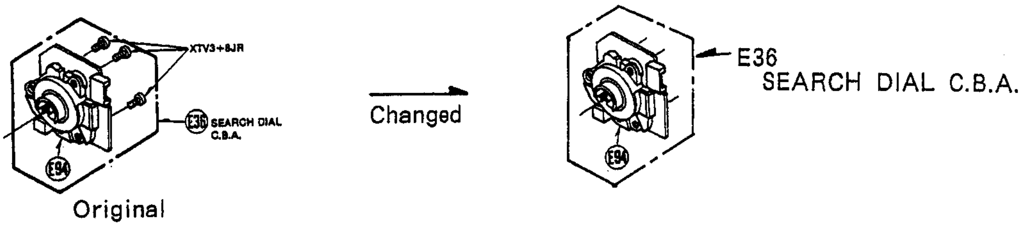
4 Chassis Frame Section – (1) Page 5-4


XTV3+8F
XTV3+8F
698
Changed
XTV3+8F
XYE3+EF8
XTV3+8F
3
4
5
6
7

5 Chassis Frame Section – (2) Page 5-5


XTV3+8FR
620
E50
E3
POWER JUNCTION C.B.A.
Changed
XYE3+EF8R
643
XTV3+10F
644
XTV3+8F
E4
SUB POWER JUNCTION C.B.A.
XTV3+8FR
XTV3+8F
XTV3+8FR
E10 Changed
NORMAL AUDIO C.B.A.
XTV3+8F
E64
E65
E68
E67
E14
AUDIO OSC C.B.A.
E65
E66
E67
E69
E13
SUB AUDIO (B) C.B.A.
E12 SUB
XTV3+8F
646
648
647
XTV3+16F
Changed
648
E27
CAP BACK UP C.B.A.
XTV3+8FR
XTV3+8F
E28
SUB CAP BACK UP C.B.A.
XTV3+8F
E53
XTV3+8F
E55
E52
E7
SUB FRAMING C.B.A.
E8
SUB SYSTEM CONTROL C.B.A.
E54
XTV3+8F
V. SEPARATION C.B.A.
XYN3+F12S
650
652
648
648
XTV3+16F
Changed
653
E99
Changed
XTV3+8F
E18
Y/C PACK C

6 Casing Parts Section


XTV3+8JR
E36 SEARCH DIAL C.B.A.
E94
Original
Changed
E36
SEARCH DIAL C.B.A.
E94